Petroleum Monitoring Agency Canada
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Canadian Petroleum Industry
1988 Monitoring Report

First Six Months

Canada

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Canadian Petroleum Industry

1988 Monitoring Report

First Six Months

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Ottawa, Ontario
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Aussi disponible en français

The Honourable Marcel Masse
Minister of Energy, Mines and Resources
Ottawa, Ontario

Dear Minister:

I am pleased to submit the attached report which describes the financial performance of the oil and gas industry in Canada during the first six months of 1988. The report is based on data from 127 companies accounting for some 90% of total revenues of the petroleum industry. Therefore, the data reflects fairly the performance of the entire industry in Canada.

Overall net income during the first six months of 1988 declined 29% to $1.3 billion. The renewed weakness of international crude oil prices in 1988 together with the rise in the Canadian dollar in relation to the U.S. dollar resulted in average prices for crude oil close to the low of 1986 and for natural gas below the low of 1987. This situation put downward pressure on the industry's profitability and cash flow.

The price decline for oil and gas came after a period of relative stability and improvements in profitability during 1987 compared with 1986. Last year's improved cash flow, new government incentives to encourage capital outlays and optimism about future prices encouraged the industry in 1988 to commit itself to increased capital outlays – up 45% over the first six months of 1987. The reported rise of 32 percentage points in the industry's reinvestment rate to 93% reflects again amplifications of change due to lag times so typical for this business.

Respectfully submitted,

Pierre Camu
Chairman

December 1, 1988

New and Notable

New information is presented in this Monitoring Report and, as in the past, it is crucial that the report be read with a number of caveats to which attention is drawn under "Notable".

New

- Table 6, representing the financial performance and profit margins of the refining and marketing segment, has been expanded to incorporate net income as a component of the analysis.

- Analysis of the industry's use of Exploration and Investment Tax Credits together with an explanatory table have been included on page 28.

- A chart showing Canadian Crude Oil Acquisition Costs vs. Petroleum Product Prices and a short analysis has been introduced as Appendix A22 on page 63.

Notable

- In Chapters 4, 5 and 6 (International Flows of Funds, Capital Structure, and Income Tax-Related Data) statistics for the full year 1987 are compared with the full year 1986. These data were not available when the report for the year 1987 was issued.

- Full implementation of the 1987 change in the control status of Husky Oil Ltd. – from Canadian controlled to foreign controlled – has been provided in this report together with the reclassification of Canterra Energy Ltd., Dome Petroleum Ltd. and Bow Valley Industries Ltd. However, the reclassifications are not reflected in Chapters 4, 5 and 6 that provide comparisons between annual 1986 and 1987 data.

- The reorganization of Gulf Canada Corporation into a number of separate publicly traded companies resulted in the oil and gas business, formerly carried on by Gulf Canada Corporation's Oil and Gas Division, becoming a separate, publicly traded company bearing the name Gulf Canada Resources Limited. Consequently, the 'other Canadian operations' of Gulf Canada Corporation are no longer included in that category for the first six months of 1988. Therefore, a discontinuity has occurred in financial data between the first half of 1987 and the corresponding 1988 period, with a substantial reduction in long-term assets, property, plant and equipment, long-term debt and retained earnings.

- Significant restructuring of the Canadian petroleum industry continued in the first six months of 1988, due to numerous acquisitions and mergers. Of particular interest were the following:
  - — Canterra Energy Ltd. sold its 33% interest in Rainbow PipeLine Co. Ltd. to Shell Canada Limited. In addition, Canterra sold 10% of its oil and gas reserves.
  - — North Canadian Oils Ltd. acquired a controlling interest in Trigen Resources Corp., a California company involved in the brokerage of natural gas.
  - — Manoil Ltd. purchased a 47% minority interest in Pembina Resouces Ltd. and now owns 100% of the company.
  - — Page Petroleum Ltd. was placed into receivership.
  - — Ocelot Industries Ltd. sold its producing crude oil and natural gas properties in Alberta to Esso Resources Canada Ltd.
  - — Chauvco Resources Ltd. acquired 89% of Tripet Resources Ltd.
  - — Gulf Canada Resources Ltd. acquired Asamera Inc.
  - — Total Erickson Resources Ltd. acquired additional shares in Ranchmen's Resources Ltd. to become the single largest shareholder at 44% of voting rights.
  - — Canadian Occidental Petroleum Ltd. acquired the energy assets of Moore McCormack Resources Inc., a United States company.
  - — Dynamar Energy Ltd. was placed in receivership.
  - — Coseka Resources Ltd. sold natural gas reserves to an unidentified buyer.
  - — Asamera Inc. sold all of its Canadian oil and gas assets to Gardiner Oil and Gas Ltd.
  - — Bow Valley Industries Ltd. acquired natural gas reserves from Ocelot Industries Ltd.
  - — Inverness Petroleum Ltd. sold its U.S. subsidiary, Petroleum Reserve Corp.
  - — Renaissance Energy Ltd. purchased all of the investors' interest in two partnerships formed to acquire producing oil and gas properties.

- Appendix A1 'Year in Review' sets out in detail events worthy of note.

- Many *numbers* in the body of the report are *rounded* to improve readability. Percentage changes, however, are calculated on the basis of detailed figures shown in Appendix B.

- While 131 companies have reported to the PMA (see Appendix E), the report is based on data from 127 companies. Four companies have been excluded due to the lack of comparable data for the preceding period.

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Summary and Highlights

General Economic Background

Canada's real Gross Domestic Product (GDP) grew at an annual rate of 5% to $439 billion (1981 dollars) during the first half of 1988, as private capital formation was up by 15%, driven by machinery and equipment purchases. Consumer and government expenditures rose by less than the increase in real GDP, while imports rapidly increased, more than offsetting higher export growth.

Inflation, as measured by the Consumer Price Index, slowed slightly to an annual rate of 4.1% during the current period, against 4.3% in the first half of 1987. Unemployment dropped from 9.3% during the first six months of 1987 to 7.8% in the same 1988 period as employment grew from 11.8 million persons to 12.8 million.

Overall energy demand grew by 7% to 4250 petajoules.

Financial Performance

Total Operations

- Profits: *Net income from total operations declined 29% or $520 million to $1.3 billion in the first six months of 1988 vs. 1987.* The drop in crude oil and natural gas prices due to lower world prices and the strengthening of the Canadian dollar vis-à-vis the U.S. dollar lowered upstream net income. In addition, higher operating costs, increased federal excise taxes and higher non-cash charges reduced overall industry profits.

Partly offsetting these negative factors were lower royalties, interest charges, and current income taxes.

- Net income for foreign-controlled companies was down 36% to $760 million as lower upstream profits more than offset gains from other Canadian operations, petrochemicals and foreign activities. Net income for Canadian-controlled companies declined 14% to $520 million, reporting, as did their foreign-controlled counterparts, lower earnings in upstream and other Canadian operations, which more than offset improvements in other activities.

- The rate of return on shareholders' equity for the total Canadian petroleum industry was 6.5% in the first six months of 1988 against 9.9% in the corresponding 1987 period. However, the five-year average rate of return for the period ending June 1988 rose to 5% from an average of 4.6% ending in 1987. The return on the capital employed by the Canadian petroleum industry in the first six months of 1988 declined to 5.3% from 6.6% in 1987.

Upstream Operations

- Revenues from upstream operations fell 3% to $8.3 billion in the first six months of 1988 over the corresponding 1987 period. Increased production of crude oil and natural gas was inadequate to offset the impact of price declines. As higher production volumes resulted in increased operating costs, and larger exploration and development expenditures caused increased non-cash charges, upstream net income had to decline markedly: down by more than half ($590 million), to $525 million in the first six months of 1988. First half cash flow decreased by 7% to $3 billion.

Downstream Operations

- *Total downstream revenues* increased 4% to $13.5 billion as a result of increased demand, especially for petrochemicals, and higher federal sales and excise taxes passed through to consumers. Net income rose 26% to $590 million in the first six months of 1988 from $470 million in 1987 due to greater demand for chemicals which provided the major strength in this business segment.

Net income for refining and marketing rose $10 million to $325 million in the first six months of 1988 although the return on capital employed declined to 6.2% from 6.3% in the first half of 1987.

Sources and Uses of Funds

Internal Cash Flow

- *Internal cash flow from total operations decreased 3% to $4.4 billion* in the first six months of 1988 due primarily to the effects of lower oil and gas prices, higher sales and excise taxes, and increased operating expenses. Upstream cash flow fell 7% – this more than offset improvements in all other business segments.

Net External Sources

- *Net external sources were negative, $860 million in the first six months of 1988* – a decrease of $1.8 billion compared with 1987; this means that the petroleum industry was a net supplier of funds to other sectors of the Canadian economy. Redemptions of long-term debt exceeded new issues by $880 million, while new equity net of repayments was $25 million in the first half of 1988.

Discretionary Uses

- In the first six months of 1988, the industry increased its net capital outlay by 48% to $4.1 billion reflecting increased incentives provided by the federal and provincial governments. Dividend payments fell from $735 million to $680 million. The excess of "All Other Sources" over "All Other Uses" in the first six months of 1987 resulted from the transfer of funds due to the reorganization of corporate activities and the sale of corporate assets. In the first six months of 1988 "All Other Sources" equalled "All Other Uses". The net draw-down of working capital of $1.2 billion in the first half of 1988 was in contrast to the unchanged working capital position in 1987.

- *Incentives Grants* (as deductions to gross capital expenditures) were up from $96 million in the first half of 1987 to $152 million in 1988 largely as a result of higher exploration and development activity and the full implementation of the CEDIP program.

Capital Expenditures

- *Total Capital Expenditures* in the first half of 1988 increased 47% or $1.4 billion to $4.4 billion, as a 52% increase in expenditures in Canada outweighed a 5% drop in outlays abroad. Upstream spending, representing 79% of the total, rose 56% to $3.4 billion.

- *Exploration Expenditures in Canada* rose 42% to $1.6 billion in the first half of 1988, with expenditures increasing 35% in the provinces and 89% on Canada Lands. Expenditures on Canada Lands accounted for 17% of the total vs. 13% for the first six months of 1987. Outlays by foreign-controlled companies were 29% higher in the first half of 1988, while those for Canadian-controlled companies were up by 58%.

- *Downstream Expenditures* rose 36% to $525 million in the first six months of 1988 over 1987. Higher expenditures on refineries, heavy oil upgrading, pipelines and marketing outlets more than offset declines in spending on petrochemical plants.

Reinvestment Rates

- Net capital expenditures absorbed 93% of the industry's internal cash flow in the first half of 1988, up from 61% in 1987. Upstream capital expenditures totalled 107% of cash flow, up 45 percentage points from 1987.

Dividends

- *Dividends declined 7% to $680 million in the first six months of 1988.* Dividends by Canadian-controlled companies declined 4% to $240 million yielding a payout rate of 46%. Payments by foreign-controlled companies fell by 9% to $440 million for a payout rate of 58%.

Comparative Performance: Petroleum and Other Industries

Net Income

- According to Statistics Canada data, the petroleum industry's net income from Canadian operations – exclusive of Crown corporation results – decreased 14% to $1.5 billion in the first six months of 1988, compared with a 31% increase to $11.4 billion for all other non-financial industries. The petroleum industry's net income for 1988 represented 11% of all non-financial industries' net income, equalling the record low established in the first six months of 1986.

Capital Expenditures

- The petroleum industry's capital expenditures in Canada increased 89% in the first half of 1988. Capital expenditures of other non-financial industries increased 34% with the result that the petroleum industry represented 19% of total non-financial industries' capital expenditures compared to 14% in the first six months of 1987.

The following summaries and the related sections of the report compare the full year 1987 with the full year 1986 for the subjects mentioned. The underlying data were not available when the 1987 Monitoring Report was prepared.

International Flows of Funds: 1987 vs. 1986

The international flows of funds related to long-term capital movements to and from the Canadian petroleum industry resulted in a net inflow of $370 million in 1987. An inflow of $1.7 billion from capital account transactions more than offset outflows from current account activities.

Interest and dividend outflows (net of inflows) of $675 million and $515 million respectively, coupled with net external business service payments of $125 million, resulted in an overall net current account outflow of $1.3 billion. The decrease in external dividend payments ($690 million in 1987 compared with $1.5 billion in 1986) represented the return to a more normal pattern. The 1986 outflow was in part related to two major dividend transactions detailed in the 1986 Monitoring Report.

Capital Structures: 1987 vs. 1986

Total capital employed in the Canadian petroleum industry was $61.4 billion in 1987, down marginally from the $61.8 billion employed in 1986. Long-term debt represented approximately 37% of industry capitalization in 1987 and equity 63%, a 5 percentage point increase in the equity component compared to the previous year. While part of the debt reduction was due to a major restructuring of a large Canadian-controlled company, a significant part was due to the sales of assets in an effort to pay down burdensome debt.

Income Tax-Related Data: 1987 vs. 1986

Taxable income of the petroleum industry rose 52% to $3.9 billion in 1987 from $2.6 billion in 1986 due to the partial recovery of crude oil prices from the weakest financial performance in the history of the petroleum industry. Consequently, income taxes payable to federal and provincial governments almost doubled in 1987 to $1.3 billion.

1

Financial Performance

Total Operations: Net Income and Cash Flow

Petroleum industry revenues rose 1% to $23.9 billion in the first six months of 1988 over the same 1987 period. Although lower crude oil and natural gas prices depressed upstream revenues, higher downstream revenues resulted from greater demand, particularly for petrochemicals.

Net income from total operations declined 29% ($520 million) to $1.3 billion in the first half of 1988 vs. 1987. The drop in crude oil and natural gas prices due to lower international prices and the strengthening of the Canadian dollar vis-à-vis the U.S. dollar together with higher expenses resulted in upstream net income declining by more than half ($590 million) to $525 million in the first six months of 1988; downstream profits, however, rose $120 million to $590 million on the strength of the chemicals business as refining and marketing net income increased only $10 million to $325 million. Profits of other Canadian operations recorded a 50% decline to $70 million. In contrast, net earnings of foreign operations rose 26% to $95 million in the first six months of 1988.

Internal cash flow from all business segments declined $135 million (3%) to $4.4 billion. The drop was due to:

- lower crude oil and natural gas prices;
- higher federal sales and excise taxes; and
- higher operating and other cash costs.

Partly offsetting these negative factors were lower royalties, interest charges, and current income taxes.

Table 1.
Overview of Total Operations in billions of dollars[a]
First six months

	1987	1988	Change	Change %
Total Revenues	**23.6**	**23.9**	**0.3**	**1**
less:				
Operating Costs	4.4	5.0	0.6	14
Interest Expenses	1.3	1.1	– 0.2	– 15
Non-income Taxes and Royalties	3.4	3.7	0.3	8
Other Cash Expenses	9.3	9.1	0.2	– 2
Income Taxes				
Federal	0.7	0.5	– 0.2	– 20
Provincial	0.1	0.1	–	– 12
Internal Cash Flow	**4.6**	**4.4**	**– 0.2**	**– 3**
less:				
Write-offs[b]	2.4	2.9	0.5	21
Deferred Taxes	0.4	0.3	–0.1	–16
Net Income before Unusual Items	1.8	1.3	– 0.5	– 31
Unusual Gains	–	–	–	–
Net Income	**1.8**	**1.3**	**– 0.5**	**– 29**

Notes:
(a) Figures may not add due to rounding. See Appendix B1 for detail by operating segment.
(b) The components of 'write-offs' are non-cash charges and exploration and development expenditures charged to current operations.

Net Income by Sector

Both sectors of the industry experienced reductions in net income in the first six months of 1988 with earnings for foreign-controlled companies down 36% to $760 million, while those for Canadian-controlled companies declined 14% to $520 million.

Canadian-controlled companies reported declines for upstream and other Canadian operations. However, downstream operations showed a gain of $40 million while net income from foreign operations remained virtually unchanged which only partially offset the other declines. A 6% increase in overall revenues together with lower interest payments and extraordinary gains of $5 million in the first six months of 1988 (vs. extraordinary losses of $120 million for the comparable period in 1987) were more than offset by an 18% increase in operating costs and a 34% rise in non-cash charges, producing the 14% decline in net income. However, cash flow for the sector overall – unaffected by non-cash charges – rose 8% to $1.9 billion in the first half of 1988 (Appendix B6).

Net income for *foreign-controlled companies* dropped 36% to $760 million in the first six months of 1988. Gains were recorded for downstream, other Canadian operations and foreign activities, while net income was lower for upstream operations. As overall revenues remained virtually unchanged, increases in operating costs and non-cash charges were instrumental in causing lower profits. The takeover of a number of Canadian-controlled companies with large debt, and consequently high interest charges, by foreign-controlled companies resulted in foreign-controlled companies now reporting nearly two-thirds of total industry interest charges in the first half of 1988 compared with 30% shown in the 1987 Monitoring Report. However, for consistency these companies were treated as foreign-controlled in the first six months of 1987 and 1988. Cash flow for foreign-controlled companies decreased 10% to $2.6 billion in the first six months of 1988.

Table 2.
Net Income by Sector and Segment in billions of dollars
First six months

	1987	1988	Change	Change %
Canadian-Controlled Companies				
Upstream	0.3	0.3	–	– 9
Downstream	0.1	0.2	0.1	28
Other[a]	0.1	0.1	–	– 63
Total Canadian-Controlled	**0.6**	**0.5**	**0.1**	**– 14**
Foreign-Controlled Companies				
Upstream	0.8	0.2	– 0.6	– 71
Downstream	0.3	0.4	0.1	25
Other[a]	0.1	0.1	–	59
Total Foreign-Controlled	**1.2**	**0.8**	**– 0.4**	**– 36**
Total Industry	**1.8**	**1.3**	**– 0.5**	**– 29**

Note:
(a) Comprises net income generated by foreign activities and other Canadian operations. For more detail see Appendices A12 and B5-6.

Rates of Return

Return on Equity

The rate of return on shareholders' equity for the total Canadian petroleum industry was 6.5% for the first six months of 1988 against 9.9% in the corresponding period of 1987. The decrease in profitability was due to the depressing effects of lower crude oil and natural gas prices. Canadian-controlled companies had a 5.2% return on equity compared with 7.9% for foreign-controlled companies. The industry's average rate of return on equity for the five-year period ending June 1988 rose to 5% from an average of 4.6% ending in 1987 (Appendix A13).

The narrowing of the gap between the rates of return for foreign- and Canadian-controlled companies reflects the reclassification, following takeovers, of a number of heavily indebted Canadian-controlled companies to foreign-controlled status and the relatively stronger performance of the remaining Canadian-controlled sector vis-à-vis the foreign-controlled sector.

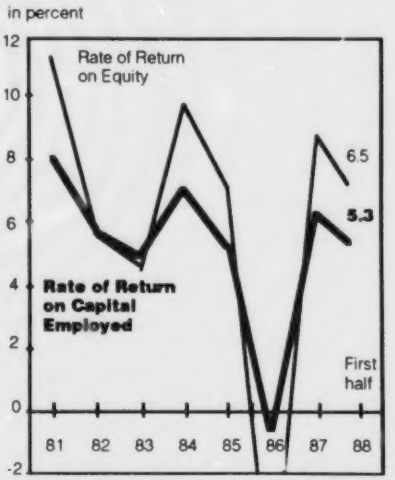
Return On Capital Employed

The return on capital employed by the Canadian petroleum industry in the first six months of 1988 declined to 5.3% from 6.6% in the first half of 1987. The return on capital employed averaged 4.6% in the five-year period ending 1988 vs. 4.5% at the close of the 1987 period. Upstream return on capital employed fell to 4.2% from 6.6% in the first half of 1987, while the downstream return declined to 6.2% in 1988 from 6.3% in the first half of 1987.

Foreign-controlled companies obtained a 6% return on capital employed for total operations in the first half of 1988, down from 7.8% in 1987. The upstream segment of this sector saw its return on capital employed fall from 8.3% to 4.6% in the first half of 1988.

The *Canadian-controlled* sector's rate of return on capital employed was 4.4% in the first half of 1988, down from 5.1% in 1987. The rate of return on upstream capital employed was 3.7% vs. 4.5% during the first half of 1987.

Chart 1
Rates of Return



Rate of return on equity extends to -7.1 for 1986

Table 3.
Rates of Return by Sector and Segment in percent
First six months

	Canadian-Controlled		Foreign-Controlled		Total Industry	
	1987	1988	1987	1988	1987	1988
Return on Equity						
Total Operations	6.4	5.2	13.7	7.9	9.9	6.5
Canadian Operations	6.4	5.2	13.6	7.4	9.8	6.2
Return on Capital Employed						
Total Operations	5.1	4.4	7.8	6.0	6.6	5.3
Canadian Operations	5.3	4.5	7.7	5.9	6.6	5.2
Upstream Operations	4.5	3.7	8.3	4.6	6.6	4.2
Downstream Operations[a]	4.8	4.4	7.3	7.4	6.3	6.2

Note:
(a) Downstream, in this table, represents oil products operations only, i.e. it excludes petrochemical and other downstream operations.

Interest Coverage[1]

For the industry overall, income before taxes, extraordinary items and expensed interest was 2.9 times total interest charges, both capitalized and expensed, down from the 3.2 times coverage in the first six months of 1987. This deterioration in interest coverage was the result of declines in upstream income exceeding the reduction in overall interest charges.

Net income before taxes and interest for Canadian-controlled companies was $1.1 billion in the first six months of 1988 – down 22% from the level of $1.5 billion recorded in the first half of 1987. Simultaneously, interest charges fell 21% from $490 million in the first six months of 1987 to $390 million as long-term debt was reduced through repayment and as a result of the reorganization of corporate activities (non-petroleum long-term assets together with their corresponding liabilities were placed in non-reporting companies). Consequently, the interest coverage for this sector declined slightly to 2.9 times in the first half of 1988 vs. 3 times in 1987.

Foreign-controlled companies' interest coverage moved to 2.9 times in the first six months of 1988 from 3.4 times in the comparable 1987 period. The decrease resulted from a 24% decline in income before tax and interest while interest charges dropped only 11%.

Interest coverage became equal for both foreign- and Canadian-controlled groups for the first time since the Agency has reported this measure of financial health due to the earlier noted changes in control status of a number of large Canadian-controlled companies which carried significant amounts of debt.

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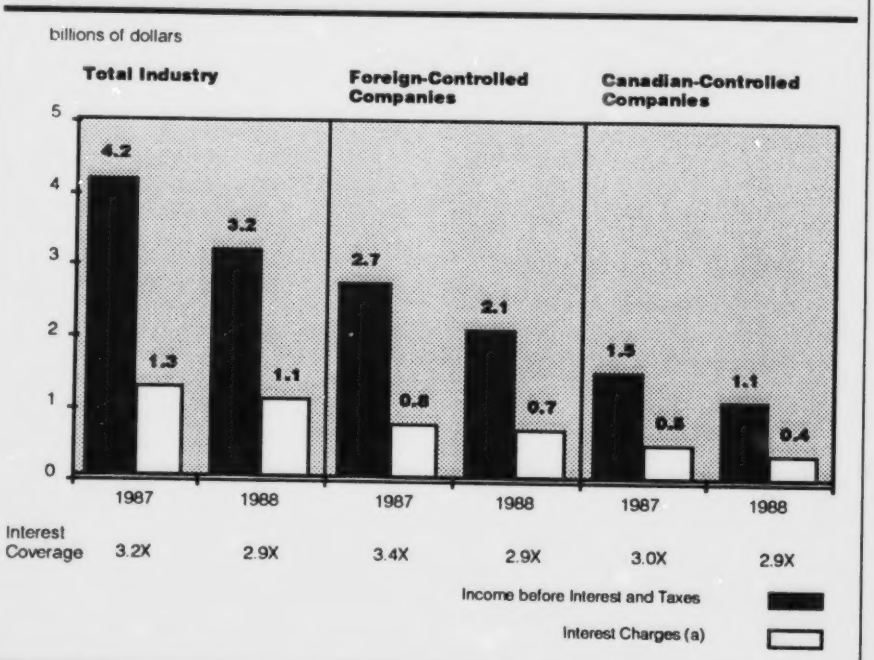
(1) This analysis of interest coverage relates to total industry activity since there is neither consistency nor uniformity in the way companies allocate interest expenses among the various business segments – upstream, downstream, other Canadian and foreign.

Chart 2.
Comparison of Interest Charges with Income before Taxes
First six months



Note:
(a) Interest charges shown include both expensed and capitalized amounts. See Appendix A19 for more detail.

Net Income by Company Group

Integrateds and Refiners

A total of 14 companies grouped in the category 'integrateds and refiners' make up almost the entirety of the downstream segment in terms of revenues, and account for 31% of upstream operations. *Net income for the group declined 11% or $100 million to $860 million* in the first half of 1988. Lower net income from upstream operations overshadowed higher profits from a buoyant petrochemical segment and improvements in other Canadian operations and foreign activities. Refining and marketing net income increased $10 million to $325 million.

Oil and Gas Producers

The 113 'oil and gas producers' are active almost exclusively in upstream operations. The impact of the decline in oil and gas prices was cushioned by higher production resulting in gross upstream revenues increasing by one-half of one per cent to $5.7 billion (Appendices B3-5). However, the group's net income fell by half to $415 million in the first half of 1988 largely as a result of higher operating costs and increased non-cash charges (including deferred income taxes) which more than offset lower interest expenses and current income taxes.

Profit declines were recorded for upstream operations and other Canadian activities, while improvements were shown in foreign operations and the small downstream segment.

A technical decline in net income for the 'other Canadian operations' of oil and gas producers was due to accrued equity earnings and the sale of assets reported as negative non-cash items in the first six months of 1987 not being reported in 1988.

Table 4.
Net Income by Company Group in billions of dollars
First six months

	1987	1988	Change	Change %
Integrateds and Refiners				
Upstream	0.5	0.3	-0.2	-48
Downstream	0.4	0.5	0.1	25
Other[a]	-	0.1	0.1	107
Total Integrateds and Refiners	**1.0**	**0.9**	**-0.1**	**-11**
Oil and Gas Producers				
Upstream	0.6	0.3	-0.3	-57
Downstream	-	-	-	34
Other[a]	0.2	0.1	-0.1	-43
Total Producers	**0.8**	**0.4**	**-0.4**	**-50**
Total Industry	**1.8**	**1.3**	**-0.5**	**-29**

Note:
(a) Comprises net income generated by foreign activities and other Canadian operations. For more detail see Appendices B1-4.

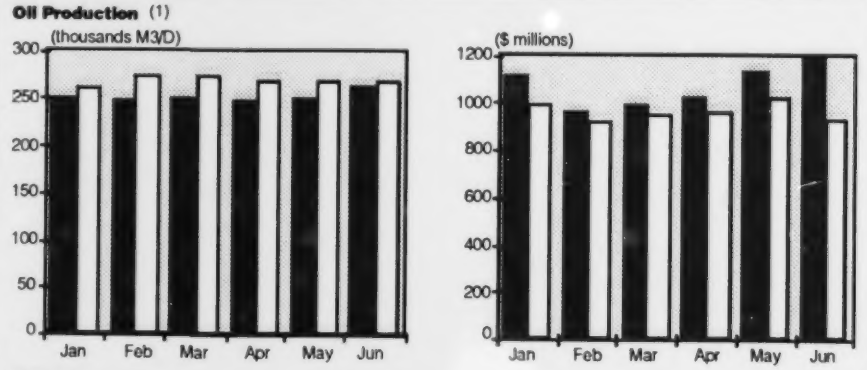
Upstream Segment

Revenues from upstream operations fell 3% to $8.3 billion in the first six months of 1988 over the corresponding 1987 period. The impact of increased crude oil production (up 7%) was offset by lower crude oil prices[1] in the first half of 1988 resulting in a revenue reduction for crude oil of $555 million. However, a 21% rise in the production of marketable natural gas more than offset the impact of gas price declines causing natural gas revenues to increase $215 million. Similarly, sulphur revenues were up, but only marginally, by $15 million, as a 36% rise in production just offset lower prices.

The average price received for conventional crude oil during the first six months of 1988 was 16% lower than the same period in 1987 – $112 per m^3 ($17.80 per bbl) vs. $133 per m^3 ($21.15 per bbl). Prices for natural gas declined 9% in 1988 to an average of $56 per 10^3m^3 ($1.98 per Mcf) from $61 per 10^3m^3 ($2.15 per Mcf) in the first six months of 1987. The average price of gas exported to the United States dropped by approximately 14%.

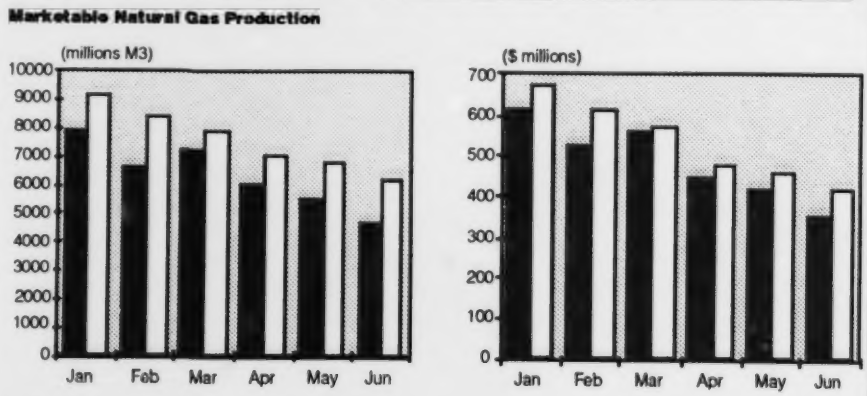
(1) Lower crude oil and natural gas prices realized by Canadian producers are a reflection of both a lower international price and a stronger Canadian dollar relative to the U.S. dollar. International oil prices are generally quoted in U.S. dollars and, as the Canadian dollar strengthens, the Canadian dollar value of oil declines.

Chart 3.
Oil and Gas Production
First six months



Source:
EMR Oil Branch

(1) Includes light, medium, heavy, experimental synthetic oil and condensates, but excludes pentanes plus.



Sources:
Canadian Natural Gas Focus
EMR - Natural Gas Branch

Upstream net income dropped 53% or $590 million to $525 million in the first six months of 1988. The 3% decline in revenues coupled with higher operating costs of $290 million (up 13%), increased other cash charges of $140 million (up 59%), higher non-cash charges of $390 million (up 21%) and higher deferred income taxes of $30 million (up 14%), were instrumental in reducing upstream profits. Operating costs rose 13% – despite effective cost control – as a result of higher production volumes and due to the deferral in 1987 of non-critical maintenance work. Partly offsetting the expense increases were lower current income taxes of $400 million (down 63%) and reduced royalties of $50 million (down 4%) (Appendix B1). Internal cash flow for the upstream segment, unaffected by non-cash charges and deferred income taxes, declined 7% or $220 million to $3 billion (Appendices A21 and B1).

Canadian-controlled companies reported a decrease of $30 million (9%) to $290 million in upstream net income. An extraordinary asset write-off of $125 million in the first half of 1987 that did not recur in the corresponding 1988 period moderated the profit decline. However, prior to extraordinary items net income fell 36%. Profits were affected by higher operating costs (up 16%) and non-cash charges (up 22%) which more than offset lower current income taxes and royalties. Cash flow decreased 2% to $1.3 billion in the first half of 1988.

Foreign-controlled upstream profits fell 71% ($560 million) to $235 million due to lower revenues and higher operating costs, non-cash charges, and deferred taxes. Cash flow decreased by 10% to $1.7 billion in the first half of 1988 over the corresponding 1987 period.

The Canadian-controlled sector's net income did not decline as much as that for the foreign-controlled group due to the former group having a greater percentage of its revenues coming from the production in natural gas, 51% vs. 41% for foreign-controlled companies. Natural gas, which experienced a lesser price decline in comparison to crude oil, benefitted from significant increases in demand.

Table 5.
Upstream Financial Performance in billions of dollars
First six months

	1987	1988	Change	Change %
Total Revenues	8.6	8.3	-0.3	-3
less:				
Operating Costs	2.3	2.6	0.3	13
Interest	0.8	0.8	–	-5
Royalties, Taxes	1.4	1.4	–	-4
Other Expenses	2.1	2.6	0.5	25
Income Before Taxes	**2.0**	**1.0**	**-1.0**	**-50**
Current Taxes	0.6	0.2	-0.4	-63
Deferred Taxes	0.2	0.2	–	14
Net Income before Unusual Items	1.2	0.5	-0.7	-55
Unusual Gains	-0.1	–	0.1	–
Net Income	**1.1**	**0.5**	**-0.6**	**-53**

Downstream Segment

Refining and Marketing

Refining and marketing revenues increased 1% to $11.5 billion in the first six months of 1988 as a result of higher sales volumes and the flow through of higher federal sales and excise taxes, up 18%. Cost of goods sold were down 5%.

Net income rose $10 million to $325 million in the first half of 1988. Higher distribution, selling and administration expenses were more than offset by lower deferred taxes.

Cash flow for Refining and Marketing Operation decreased 9% or $65 million to $630 million in the first half of 1988 over the corresponding 1987 period.

Gross profit margins, defined here as the difference between average sales revenue, direct taxes and cost of goods sold, increased to 6.2¢ per litre in the first six months of 1988 from 5.9¢ per litre in 1987. The improvement was the result of greater demand for oil products and lower feedstock costs (Appendix A21).

Average crude oil refiner acquisiiton costs by region and related transportation costs are shown in Appendices A6 and A7.

Table 6.
Refining and Marketing Financial Performance and Profit Margins
First six months

	1987		1988		Change
	$ millions	¢/litre	$ millions	¢/litre	¢/litre
Gross Sales	11183	28.20	11295	28.22	0.02
Other Revenue	241	0.61	224	0.56	- 0.05
Total Revenue	**11424**	**28.81**	**11519**	**28.78**	**- 0.03**
less:					
Federal Sales and Excise Taxes	1930	4.87	2271	5.67	0.81
Cost of Goods Sold	7139	18.00	6787	16.96	- 1.05
Gross Profit Margins	**2354**	**5.94**	**2460**	**6.15**	**0.21**
less:					
Distribution, Selling and Administration Expenses	1428	3.60	1601	4.00	0.40
Cash Income before Interest and Current Taxes	**926**	**2.33**	**860**	**2.15**	**- 0.19**
Interest Expenses	36	0.09	37	0.09	–
Current Income Taxes	193	0.49	191	0.48	- 0.01
Cash Income after Current Taxes	**697**	**1.76**	**632**	**1.58**	**- 0.18**
Depreciation and Other Non-Cash Charges	280	0.71	280	0.70	- 0.01
Deferred Income Taxes	103	0.26	51	0.13	- 0.13
Extraordinary Gains	1	–	25	0.06	0.06
Net Income after Extraordinary Items	**316**	**0.80**	**325**	**0.81**	**0.02**

Other Downstream Operations
Net income for other downstream operations, mainly petrochemicals, rose 73% ($110 million) to $265 million in the first half of 1988 over 1987, largely the result of greater demand for chemicals. Internal cash flow increased 48% to $375 million (Appendix B9).

Total Downstream
The combined revenue of petroleum products and petrochemical operations increased 4% to $13.5 billion. Net income rose 26% to $590 million in the first six months of 1988 from $470 million in 1987 and cash flow increased 6% ($55 million) to $1 billion.

Other Canadian Operations

This business segment, which includes corporate income and expenses, recorded a profit of $70 million in the first six months of 1988 compared with $140 million in 1987 when sizeable amounts of accrued equity income (reported as negative non-cash charges) improved net income for that period. However, as this was not repeated in 1988, net income declined in comparison. Cash flow, unaffected by write-offs and non-cash charges, rose from $140 million in the first six months of 1987 to $155 million in 1988.

As noted in previous Monitoring Reports, many companies treat financing activities, and thus interest expense, as a corporate function – by definition included in 'other Canadian operations'. Although a larger number of companies now allocate interest charges to other segments, 25% of the industry's total interest expenses remained charged to this segment which accounts for only 6% of total industry revenues.

Foreign Operations

Net income on foreign operations rose from $75 million in the first half of 1987 to $95 million in 1988. Foreign activities of Canadian petroleum companies tend to be oil and gas production operations. The improvement in net income was due to a large drop in cost of goods sold and non-cash charges. Cash flow rose 8% to $245 million.

Table 7.
Downstream Financial Performance by Subsegment in millions of dollars
First six months

	Net Income			Cash Flow		
	1987	1988	Change %	1987	1988	Change %
Refining and Marketing	316	325	3	697	632	-9
Petrochemicals	153	264	73	254	374	48
Total Downstream	468	590	26	951	1006	6

2

Sources and Uses of Funds(1)

Overview

Funds available to the petroleum industry prior to 'discretionary uses' declined $1.8 billion or 34% to $3.6 billion in the first six months of 1988 as a result of the decrease in internal cash flow of $135 million together with a reduction of $1.8 billion in net external sources. Net external sources for the first six months of 1988 were a negative $860 million indicating that the petroleum industry returned $860 million to other industries and individuals.

Redemptions of long-term debt exceeded new issues by $880 million compared with $385 million of net new debt in the first half of 1987. In the first six months of 1987, a number of companies reduced debt through reorganizations (debt, together with assets, was transferred to other industries and is no longer included within the petroleum company consolidation) and through the sale of assets. Also, a number of companies paid off debt after the sale of assets. New equity, net of repurchases, was relatively negligible ($25 million) in the first six months of 1988 compared with $470 million in the same 1987 period.

During the first half of 1988, net capital outlays were 48% higher at $4.1 billion reflecting improved incentives provided by the federal and provincial governments. Dividend payments fell from $735 million to $680 million. The excess of "All Other Sources" over "All Other Uses" in the first half of 1987 resulted from the transfer of funds due to the reorganization of corporate activities and the sale of assets. The net draw-down of working capital of $1.2 billion in the first half of 1988 was in contrast to the net increase in working capital position in 1987. The 1988 draw-down of working capital was in part due to an increase in short-term debt to finance the redemption of preferred shares by a large Canadian-controlled company. In addition, as a result of long-term debt becoming due for a number of companies entering receivership, there was an increase in short-term liabilities causing a reduction in working capital.

(1) Sources and uses of funds for an individual company are reported to the PMA on a net basis. For example, a company raising and repaying debt would report only the net amount. Similarly, companies report only the net amount with regard to changes in equity and in working capital. For the industry as a whole, the PMA continues this process of netting the aggregates to show the industry's net draw of funds from, or net contribution of funds to, other sectors of the economy. However, to allow the reader to distinguish at the aggregate level between new long-term debt and repayment of debt, etc., these aggregates are shown

Table 8.
Sources and Uses of Funds (Net) in billions of dollars
First six months

	1987	1988	Change	Change %
Internal Sources				
Net Income before Unusual Items	1.8	1.3	-0.5	-32
Non-cash Item	2.7	3.2	0.5	16
Internal Cash Flow	**4.6**	**4.4**	**-0.2**	**-3**
Net External Sources				
New Long-term Debt, Net of Repayments	0.4	-0.9	-1.3	-
New Equity, Net of Repurchases	0.5	-	-0.5	-95
Net External Sources	**0.9**	**-0.9**	**-1.8**	**-**
Net Sources	**5.4**	**3.6**	**-1.8**	**-34**
Discretionary Uses				
Net Capital Expenditures	2.8	4.1	1.3	48
Dividend Payments	0.7	0.7	-	-7
All Other Uses, Net of Other Sources	0.6	-	-0.6	-
Net Uses	**4.1**	**4.8**	**0.7**	**18**
Net Working Capital Change	**1.3**	**-1.2**	**-2.5**	**-**

Sources and Uses of Funds (Gross)

During the first six months of 1988, external funds came from a variety of sources, but were not as large in value as related uses. New long-term debt was $910 million, down $655 million, and repayment of debt rose 51% or $610 million to $1.8 billion. New share issues rose $370 million to $1.1 billion, but were equal to equity reductions – up $820 million from the previous period mainly as a result of redemptions of preferred shares. Reported individual increases of working capital totalled $1.3 billion in the first half of 1988, down $1 billion from $2.3 billion in the corresponding 1987 period.

Individually reported decreases in working capital amounted to $2.5 billion in the first six months of 1988 compared to $940 million in 1987. The increase in funds from 'all other sources' was partly due to the sale of oil and gas properties in order to reduce debt, and the rise in 'all other uses' is a reflection of increased takeover activity in the first half of 1988 vs. 1987.

Net capital expenditures, the largest component of 'uses of funds', increased 48% ($1.3 billion) to $4.1 billion (for further detail see Table 13).

Table 9.
Selected Categories of Sources and Uses of Funds in billions of dollars[a]
First six months

	1987	1988	Change	Change %
New Long-term Debt[b]	1.6	0.9	– 0.7	– 42
Repayment of Long-term Debt[d]	1.2	1.8	0.6	51
Long-term Debt, Net of Repayments	**0.4**	**– 0.9**	**– 1.3**	**–**
New Equity[b]	0.7	1.1	0.4	50
Repurchase of Equity[d]	0.3	1.1	0.8	308
Net Equity, Net of Repurchases	**0.5**	**–**	**– 0.5**	**– 95**
Working Capital Increase[d]	2.3	1.3	– 1.0	– 45
Working Capital Decrease[b]	0.9	2.5	1.6	164
Net Working Capital Change	**1.3**	**– 1.2**	**– 2.5**	**–**
All Other Sources[c]	1.3	2.3	1.0	85
All Other Uses[e]	1.8	2.3	0.5	28
Other Uses Net of Other Sources	**0.6**	**–**	**– 0.6**	**–**
Total Capital Outlays	3.0	4.4	1.4	47
CEDIP, PIP and Other Incentives	0.2	0.2	–	25
Net Capital Expenditures	**2.8**	**4.1**	**1.3**	**48**

Notes:
(a) Appendix B10 shows more detail.
(b) Represents amounts of new long-term debt, new equity, or funds from drawing down working capital by those companies that reported deriving net funds from these sources.
(c) Includes unusual gains; unusual losses are included in 'All Other Uses'.
(d) Represents the net application of funds to repay long-term debt, repurchase equity, or to build up working capital by those companies that reported using funds for these purposes.
(e) Mainly funds for acquisitions of plant and property from other corporations and for corporate takeovers.

Internal Cash Flow

Petroleum industry internal cash flow decreased $135 million or 3% to $4.4 billion in the first half of 1988 due primarily to lower crude oil and natural gas prices, higher sales and excise taxes, and increased operating and other cash charges. The upstream segment recorded a decrease of 7% ($220 million) to $3 billion, while cash flow from downstream operations rose 6% ($55 million) to $1 billion, entirely due to increased sales in the petrochemical segment. Cash flow of 'other Canadian operations' increased 10% from $140 million in the first half of 1987 to $155 million in 1988, while that from foreign activities rose 8% to $245 million.

Canadian-controlled companies' internal cash flow increased 8% to $1.9 billion largely as a result of a stronger downstream and foreign operation performance. In addition, the reorganization of a company's activities by removing the non-petroleum related activity together with its large interest costs contributed to the year-over-year improvement.

Foreign-controlled firms' cash flow was down 10% to $2.6 billion, with lower cash flow from all operations with the exception of petrochemical activities.

Table 10.
Internal Cash Flow by Sector and Segment in billions of dollars[a]
First six months

	1987	1988	Change	Change %
Canadian-Controlled Companies				
Upstream	1.3	1.3	–	– 2
Downstream	0.3	0.3	–	9
Other[b]	0.1	0.2	0.1	108
Total Canadian-Controlled	**1.7**	**1.9**	**0.2**	**8**
Foreign-Controlled Companies				
Upstream	1.9	1.7	– 0.2	– 10
Downstream	0.6	0.7	0.1	4
Other[b]	0.2	0.1	– 0.1	– 50
Total Foreign-Controlled	**2.9**	**2.6**	**– 0.3**	**– 10**
Total Industry				
Upstream	3.2	3.0	– 0.2	– 7
Downstream	1.0	1.0	–	6
Other[b]	0.4	0.4	–	8
Grand Total	**4.6**	**4.4**	**– 0.2**	**– 3**

Notes:
(a) See Appendix B5-6 for more detail.
(b) Comprises internal cash flow generated by foreign activities and other Canadian operations.

Incentives Grants and Tax Credits

The Petroleum Incentives Program (PIP) was terminated on March 31, 1986 with the exception of commitments made under existing agreements on Canada Lands. On March 25, 1987, the Government of Canada announced the establishment of the Canadian Exploration and Development Incentive Program (CEDIP) to provide direct assistance to the industry in respect of capital expenditures in the upstream segment.

Total grants rose from $96 million in the first six months of 1987 (partly PIP grants) to $152 million (mainly CEDIP grants) during the first half of 1988 reflecting higher exploration and development activity. Canadian-controlled companies received 54% of the grants in the first half of 1988, compared with 56% of the total a year earlier.

Table 11.
Incentives Grants by Area and Sector in millions of dollars
First six months

	Canadian-Controlled		Foreign-Controlled		Total	
	1987	1988	1987	1988	1987	1988
Provinces	24	78	15	67	39	145
Canada Lands	30	4	27	3	58	7
Total Canada	54	82	42	70	96	152

Note:
Appendix A17 provides additional detail.

Exploration expenses for wells costing more than $5 million attract the Exploration Tax Credit (ETC) at a rate of 25% of eligible expenses. These credits together with the Investment Tax Credit (ITC) more than doubled to $52 million in the first six months of 1988 from $22 million in the corresponding 1987 period. The major gain was the result of higher ETC accruing on Canada Lands partly offsetting reductions of incentives that occurred with the elimination of PIP grants.

Table 12.
Exploration and Investment Tax Credits in millions of dollars
First six months

	Canadian-Controlled		Foreign-Controlled		Total	
	1987	1988	1987	1988	1987	1988
Provinces	5	17	17	12	22	30
Canada Lands	–	14	–	8	–	22
Total Canada	5	31	17	21	22	52

Capital Expenditures

Gross capital expenditures in the first six months of 1988 increased sharply 47% or $1.4 billion to $4.4 billion, as a 52% increase in domestic expenditures greatly outweighed a 5% drop in outlays abroad. Accordingly, expenditures abroad as a share of total capital spending were down to 6% from 9% during the first six months of 1987. Upstream expenditures remained the largest component of total capital outlays, accounting for 79% in the first half of 1988 vs. 74% in 1987. All components of the upstream sector recorded significant increases. Downstream and non-specified expenditures rose also while the small component of energy mining showed a marginal decline.

Table 13.
Capital Expenditures in billions of dollars[a]
First six months

	1987	1988	Change		Share of Total 1987	Share of Total 1988
				%	%	%
Upstream						
Exploration	1.1	1.6	0.5	42	38	37
Development	0.4	0.6	0.2	59	13	14
Production	0.5	0.8	0.3	63	15	17
Non-conventional[b]	0.2	0.4	0.2	115	7	10
Total Upstream[c]	2.2	3.4	1.2	56	74	79
Downstream	0.4	0.5	0.1	36	13	12
Energy Mining	–	–	–	– 6	1	1
All Other	0.1	0.1	–	24	4	3
Total Expenditures in Canada	**2.7**	**4.1**	**1.4**	**52**	**91**	**94**
Expenditures Abroad	**0.3**	**0.2**	**– 0.1**	**– 5**	**9**	**6**
Total Expenditures	**3.0**	**4.4**	**1.4**	**47**	**100**	**100**
Incentive grants and other receipts	0.2	0.2	–	23		
Net Capital Expenditures	**2.8**	**4.1**	**1.3**	**48**		
Memo Items:						
Upstream Capital Expenditures (Net of incentive grants and other receipts)	2.0	3.2	1.2	59		

Notes:
(a) More detail is presented in Appendix B12.
(b) Includes oil sands and non-conventional heavy oil products.
(c) Includes PIP and CEDIP grants, and other receipts.

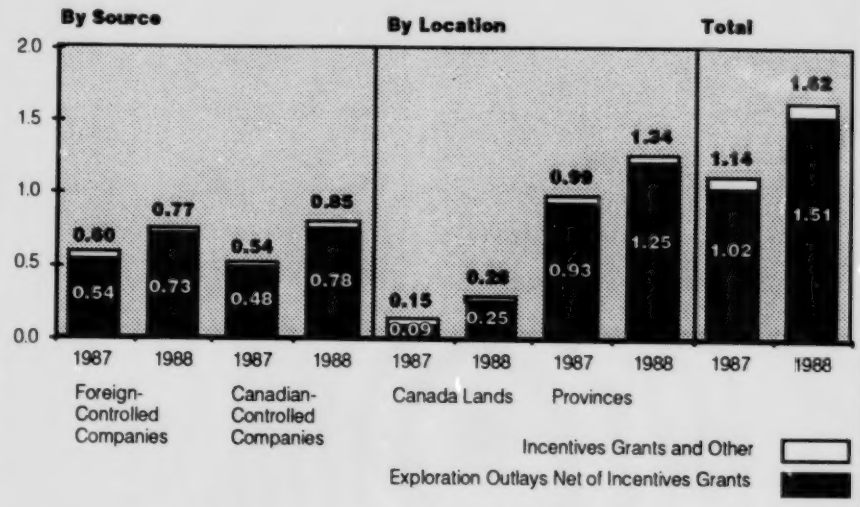
Upstream: The strengthening of crude oil prices through 1987 after the dramatic downturn in 1986, together with the provision of incentives such as the Canadian Exploration and Development Incentives Program (CEDIP) and the Alberta government's three-year royalty holiday on new discoveries prior to November 1, 1988 encouraged the industry to markedly increase upstream exploration and development activities. Overall upstream outlays rose 56% ($1.2 billion) to $3.4 billion in the first half of 1988 over the same 1987 period. Spending in all categories of upstream activity rose sharply.

Net of incentive grants, upstream outlays by Canadian-controlled companies increased 67%, while those of foreign-controlled companies rose 53%. As a result, the Canadian-controlled group of companies' share of capital spending increased 2.1 percentage points to 43.9% of the total (Appendix B11).

Exploration expenditures rose 35% to $1.3 billion in the provinces, and increased 89% to $280 million on Canada Lands. This produced a rise of 42% in total exploration spending to $1.6 billion. Expenditures on Canada Lands accounted for 17% of the total vs. 13% for the first six months of 1987, with most areas of Canada Lands experiencing increased activity.

Exploration outlays by foreign-controlled companies were 29% higher in the first half of 1988, while those for Canadian-controlled firms were up by 58%. Canadian-controlled companies accounted for 52% of total exploration spending and this share was equal for both the provinces and Canada Lands.

Chart 4.
Exploration Expenditures in Canada
First six months



Downstream Expenditures: Downstream outlays rose 36% to $525 million in the first half of 1988 due to the expansion and upgrading of refineries and increased spending on a heavy oil upgrader. Increased expenditures on refineries, pipelines and marketing outlets more than offset declines in spending on petrochemical plants.

Energy Mining and All Other: Expenditures were lower in energy mining, but higher in all other areas including those for mining facilities, drilling ships, caissons, and drilling rigs. This category of capital outlays also includes capitalized interest charges related to pre-start-up project expenditures.

Reinvestment Rates

The overall reinvestment rate for the petroleum industry – i.e. total net capital expenditures[1] as a percentage of internal cash flow from all business segments was 93%, up from 61% in the first six months of 1987.

The relative stability and partial recovery of crude oil prices throughout 1987 following the 1986 collapse of prices and the subsequent slump in activity provided the necessary impetus to increase capital outlays. With an encouraging build up of cash flow balances through 1987 and with renewed optimism that crude oil prices would rest, on average, at near or above 1987 levels, the petroleum industry committed itself to new capital projects, encouraged also by federal and provincial incentives programs. The largest capital expenditure increases occurred in high cost areas such as oil sands (up 118%) and on Canada Lands (up 89%).

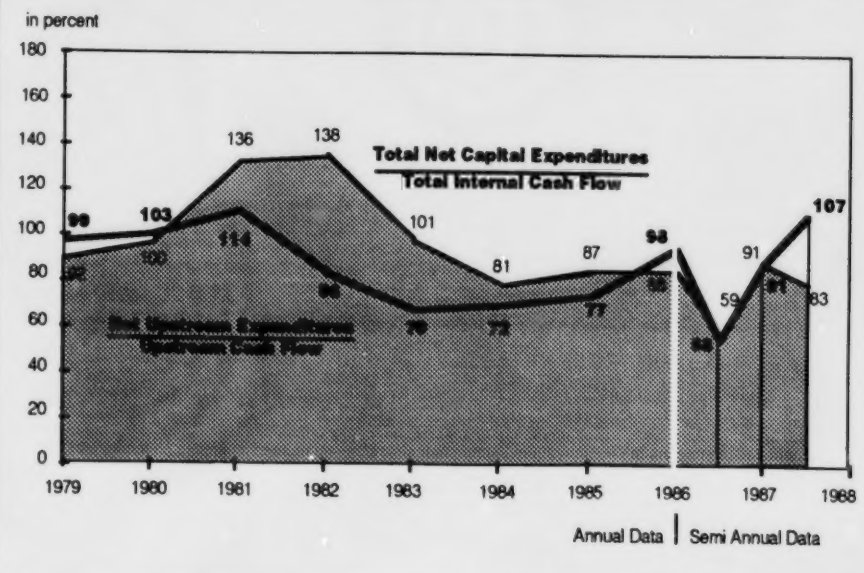
However, since prices for crude oil and natural gas declined soon after the project plans had been made, internal cash flow did not rise in accordance with industry expectation as reflected in capital expenditure commitments. This resulted in an increase in the reinvestment rate of 32 percentage points. Consequently, the 93% reinvestment rate could be viewed as abnormally high, just as the 61% rate of the first half 1987 was unusually low in relation to the realized cash flow.

Both Canadian- and foreign-controlled groups reported major overall increases in their reinvestment rates. Canadian-controlled companies total reinvestment rate rose from 72% in the first half of 1987 to 104% in 1988, while that for foreign-controlled companies increased from 54% to 85%. A comparison of the two groups in terms of upstream activities gives similar results, with Canadian-controlled companies reinvesting 109% of upstream cash flow (up 45 percentage points) vs. 105% for foreign-controlled firms (up 44 percentage points).

Upstream capital expenditures (net of incentive grants) accounted for 107% of industry upstream cash flow, up 45 percentage points from the first half of 1987. Upstream cash flow decreased 7%, while net upstream capital expenditures rose 59%.

(1) Net capital expenditures is defined as capital expenditures less incentive grants and insurance receipts.

Chart 5.
Reinvestment Rates

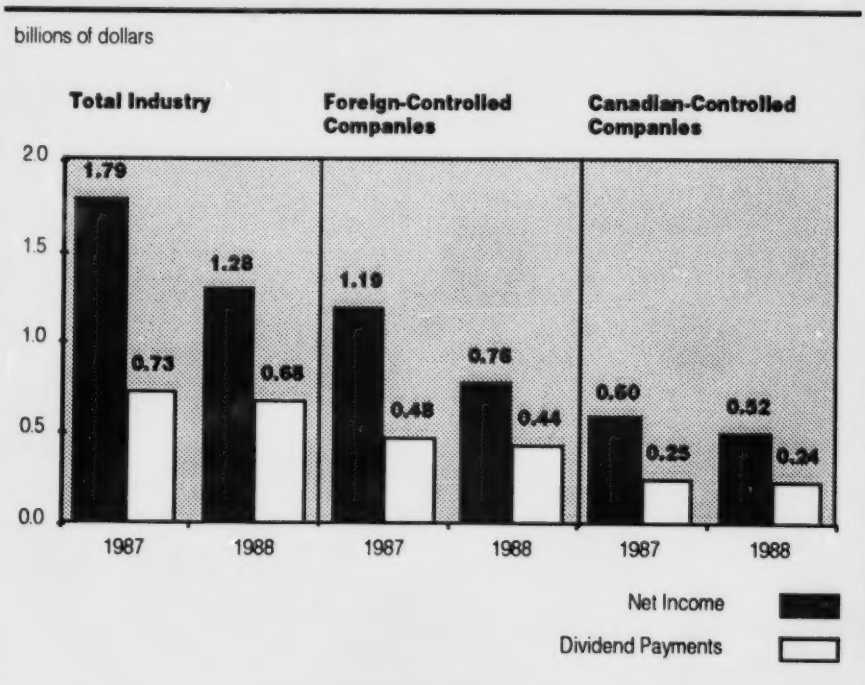


Dividend Payments

Dividend payments by the petroleum industry declined 7% to $680 million in the first six months of 1988, but not as much as net income which declined 29% from $1.8 billion to $1.3 billion. As a result, the industry payout rate rose from 41% in the first six months of 1987 to 53% for the same 1988 period.

Dividends paid by Canadian-controlled companies decreased 4% to $240 million for a payout rate of 46% in the first half of 1988, while dividend payments by foreign-controlled companies fell 9% to $440 million, a payout of 58%.

Chart 6.
Dividend Payments Compared with Net Income
First six months



3

Comparative Performance: Petroleum and Other Industries

Net Income Comparison

The petroleum sector's financial performance can be put into perspective by comparing it to other sectors of the economy using data from Statistics Canada.(1)

Exclusive of Crown corporations, the petroleum industry's net income on Canadian operations after extraordinary items decreased 14% to $1.5 billion in the first six months of 1988, compared with a 31% increase to $11.4 billion for all other non-financial industries. Chart 7 shows that the petroleum industry's net income for the first half of 1988 represented 11% of all non-financial industries' net income, equalling the record low established in the first six months of 1986.

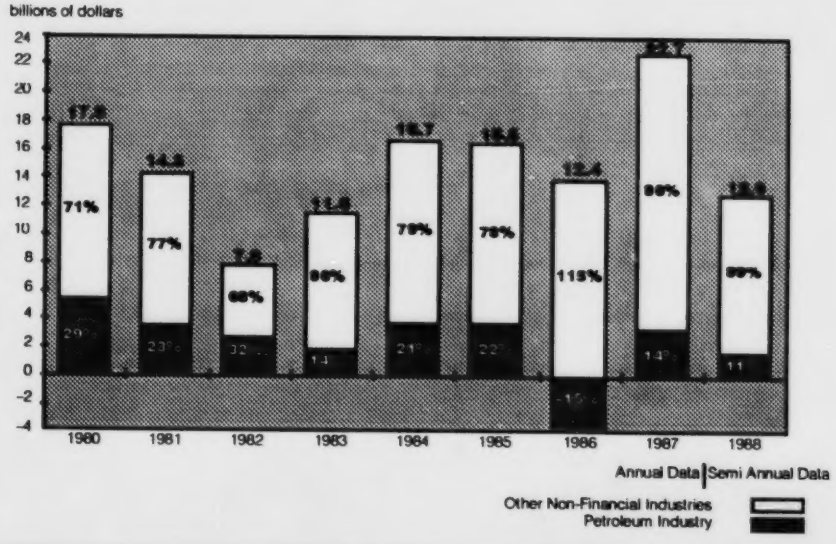
By comparison, net income of $11.4 billion for all other non-financial industries represents a record high for a first half period.

The rate of return on capital employed for the petroleum industry in the first six months of 1988 was 6% vs. 9.1% for all other non-financial industries. Return on shareholders' equity for the petroleum industry of 7.9% after extraordinary items compares with 13% for all other non-financial industries. The five-year average rate ending in the first half of 1988 was 6% for petroleum compared with 10.4% for the other industries (Appendix A14).

(1) The data given in this section of the report are not precisely comparable with those presented elsewhere although they are close to results based on the PMA survey which are reported in Chapters 1 and 2. Petroleum industry data from Statistics Canada, while covering a greater number of companies than the PMA survey, exclude government business enterprises as well as the foreign activities of companies originating in Canada. The PMA survey covers the global activities of petroleum companies operating in Canada, including Crown corporations, subject to a minimum size in terms of assets and revenues.

Rate of return calculations in Chapter 1 are derived from data received by PMA directly from reporting companies. Commentary on the comparability of these rates (Appendix A13) with those generated in Chapter 3 using Statistics Canada data (Appendix A14) can be found in Appendix D.

Chart 7.
Comparison of Net Income – Petroleum Industry vs. All Other Non-Financial Industries



Capital Expenditures

Based on Statistics Canada data, petroleum industry gross capital expenditures (i.e. before deducting incentive grants) increased 89%(1) in the first half of 1988 from the comparable period in 1987. As already mentioned, the rise in expenditures for the petroleum industry was in part due to companies having taken advantage of government incentive programs such as CEDIP prior to the benefits being reduced. In addition, the Alberta government's three-year royalty holiday on new discoveries was expected to be cut back to one year by November 1, 1988. However, on October 31, Alberta's Energy Minister announced an extension and retention of the current terms of the royalty tax credit program. Capital expenditures of other non-financial industries increased 34%, largely the result of greater strength in the mining sector and the 'other non-financial' sector. Accordingly, the capital expenditures of the petroleum industry as a proportion of total capital expenditures of all non-financial industries increased by 5 percentage points to 19% in the first six months of 1988.

(1) This data differs significantly from that published in Chapter 2 due to the fact that Statistics Canada data include here some acquisitions in the category of capital expenditures.

Table 14.
Comparison of Capital Expenditures – Petroleum Industry vs. All Other Non-Financial Industries in billions of dollars
First six months

	1987	1988	Change	%
1. Manufacturing	4.8	4.9	0.1	2
2. Mining	1.3	1.7	0.4	34
3. **Other Non-Financial**	**8.3**	**12.6**	**4.3**	**53**
4. **Total Non-Financial** excluding Petroleum	**14.4**	**19.3**	**4.9**	**34**
5. Petroleum	2.4	4.4	2.1	89
6. **Total Non-Financial** including Petroleum	**16.7**	**23.7**	**7.0**	**42**
7. Line 5 as a % of line 6	14	19		

Source:
Statistics Canada, 61-003, *Industrial Corporations – Financial Statistics*. This survey does not include government enterprises. Expenditures are gross, including capital grants.

4

International Flows of Funds: 1987 vs. 1986

In this chapter and the next two (Capital Structure and Income Tax-Related Data) statistics for the full year 1987 are compared with the full year 1986. These data were not available when the report for the year 1987 was issued.

The international flow of funds[1] related to long-term capital movements to and from the Canadian petroleum industry resulted in a *net inflow of $370 million* in 1987. The outflows from all types of current account transactions were more than offset by an inflow of $1.7 billion from capital account transactions (Appendix A23). The capital account inflow was the result of increased bank debt raised abroad by the foreign-controlled sector and the purchase of a major equity position in a large Canadian-controlled company by foreign interests.

Interest and dividend outflows (net of inflows) of $675 million and $515 million respectively, coupled with net external business service payments of $125 million, resulted in an overall net current account outflow of $1.3 billion. The decrease in external dividend payments ($1.5 billion in 1986 compared with $690 million in 1987) reflected the return to more normal levels. The high 1986 outflow was in part related to two major dividend transactions detailed in the 1986 Monitoring Survey.

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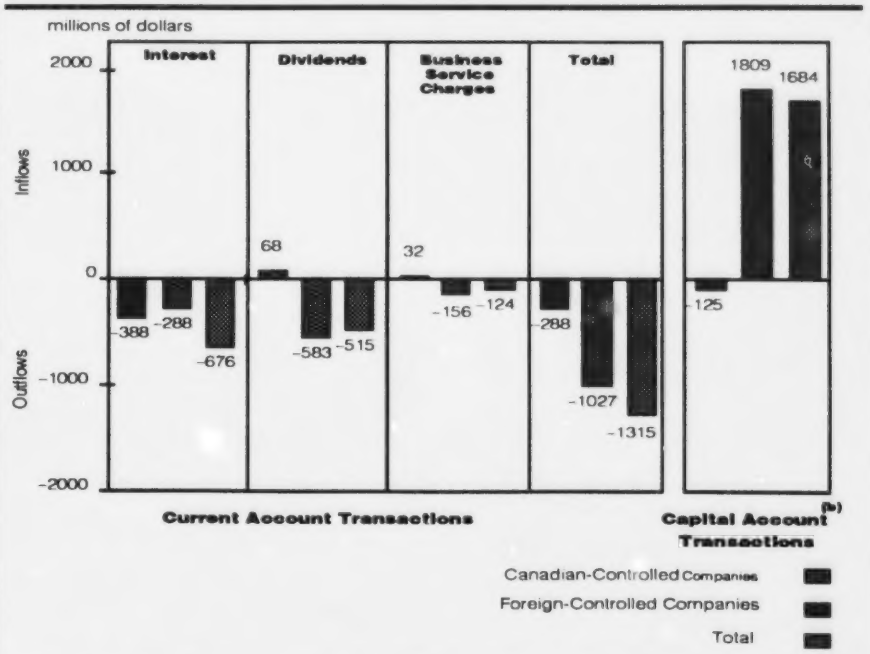
(1) Data on international flows of funds are obtained from Statistics Canada. International flows of funds to or from non-energy parent companies caused by the transactions of their energy subsidiaries are not included.

Chart 8.

International Flows of Funds Related to Long-Term Investments[a] - 1987



Notes:

(a) All figures are net amounts and exclude exports and imports of goods, and transportation services. Appendix A23 shows additional detail including short-term capital flows – these latter flows amounted to $415 million (net inflows) in 1987.

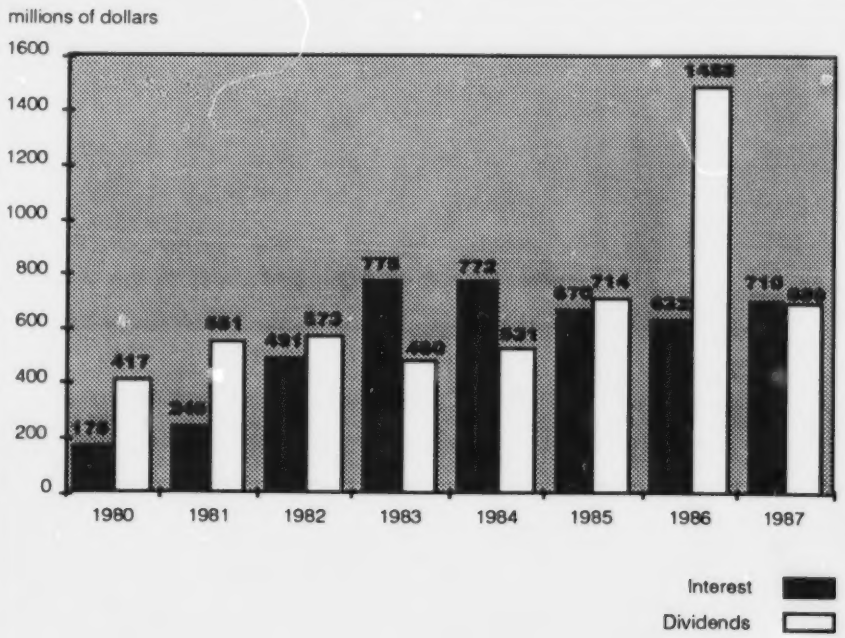
(b) Capital account represents funds related to long-term investments, such as a parent company's investment in a foreign subsidiary or the repatriation of a controlling interest from a non-resident owner.

The *Canadian-controlled sector* reported a net capital outflow of $125 million in 1987, mainly as a result of the repayment of foreign debt, a capital account transaction. Interest and dividend payment outflows from this sector of the industry amounted to $415 million and $100 million respectively, offset partly by interest inflows of $25 million and foreign dividend receipts of $170 million. Business service charge payments were on balance positive with inflows of $55 million, more than offsetting payments to non-residents of $20 million.

The *foreign-controlled sector* of the industry recorded a net inflow of $1.8 billion on capital account transactions, primarily as a result of bank borrowing and equity purchases noted earlier. At the same time within the current account, the foreign-controlled sector's interest, dividend, and business service payment outflows to non-residents were $290 million, $590 million, and $195 million respectively, with inflows amounting to $7 million, $3 million, and $37 million in each case.

Gross interest and dividend payment outflows by the petroleum industry of $1.4 billion in 1987 were significantly lower than in 1986. The 1986 unusually large outflow resulted from dividend payments made by two foreign-controlled companies. One of these involved a $500 million dividend payment to a foreign parent associated with the deferral of a major Canadian located capital project, and the other an extraordinary $500 million dividend payment offset by an equivalent increase in parent-held debt, undertaken as part of the Canadian subsidiary's capital restructuring operation.

Chart 9.
Interest and Dividend Payments to Non-Residents(a)

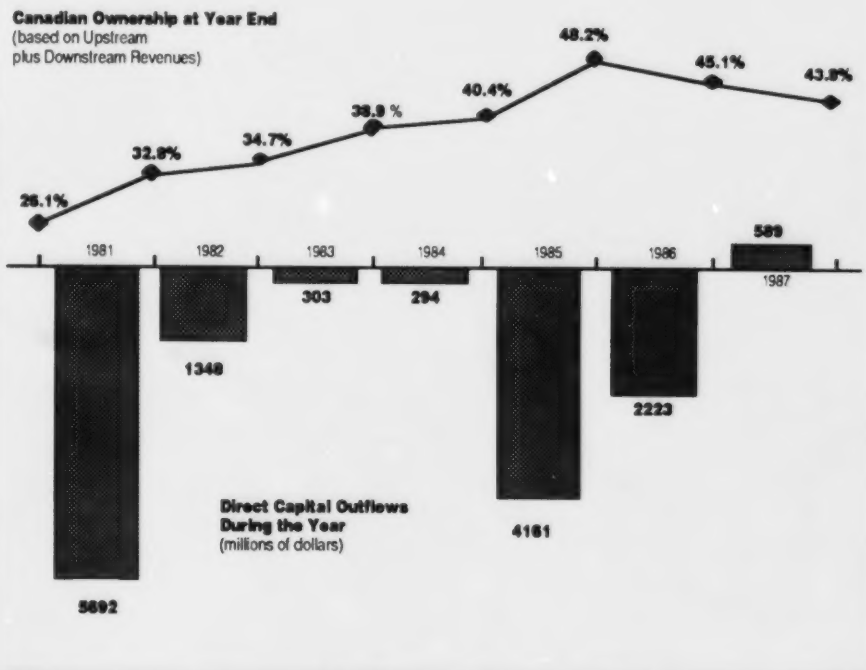


Note:
(a) Appendix A23 shows dividend and interest payments and additional details for 1987.

From 1981 through 1985, direct outflows of capital from the Canadian petroleum sector could be attributed to the cost of takeovers of foreign-controlled oil and gas companies. This increased the overall Canadian ownership rate in the industry.

In 1987, the Canadian-owned proportion of the petroleum industry's upstream plus downstream revenues declined approximately 1.3 percentage points, due to the purchase of major equity interest in a petroleum company by foreign interests. The purchase was accompanied by the inflow of capital from abroad.

Chart 10.
Direct Capital Flows vs. Changes in Canadian Ownership



5

Capital Structure: 1987 vs. 1986

Total capital employed in the Canadian petroleum industry was $61.4 billion in 1987, virtually unchanged from the $61.8 billion employed in 1986. Long-term debt represented approximately 37% of industry capitalization in 1987 and equity 63% for a 5 percentage point in favour of the equity component compared to the previous year.

Canadian-controlled companies accounted for almost 60% of the total capital employed, largely as a result of the Canadian-controlled sector's relatively higher level of debt (68% of long-term debt total) and preferred stock (91% of the total). The share of common equity of the Canadian-controlled companies increased slightly to 44% of the industry's total.

Table 15.
Capital Structure by Sector: 1987 vs. 1986 in billions of dollars

	1986	1987	Change	%	Share of Total 1986 %	1987 %
Canadian-Controlled Companies						
Equity – Preferred	5.3	5.7	0.4	8	14	16
– Common[a]	13.0	14.1	1.1	8	35	40
Total Equity	18.3	19.8	1.5	8	50	56
Long-term Debt	18.7	15.7	-3.0	-16	50	44
Capital Employed[b]	**37.0**	**35.5**	**-1.5**	**-4**	**100**	**100**
Foreign-Controlled Companies						
Equity – Preferred	0.8	0.5	-0.3	-36	3	2
– Common[a]	16.9	18.1	1.2	7	68	70
Total Equity	17.8	18.6	0.8	5	72	72
Long-term Debt	7.0	7.3	0.3	4	28	28
Capital Employed[b]	**24.8**	**25.9**	**1.1**	**5**	**100**	**100**
Total Industry						
Equity – Preferred	6.1	6.2	0.1	2	10	10
– Common[a]	30.0	32.2	2.2	8	49	52
Total Equity	36.1	38.5	2.4	7	58	63
Long-term Debt	25.7	23.0	-2.7	-11	42	37
Total Capital Employed[b]	**61.8**	**61.4**	**-0.4**	**-1**	**100**	**100**

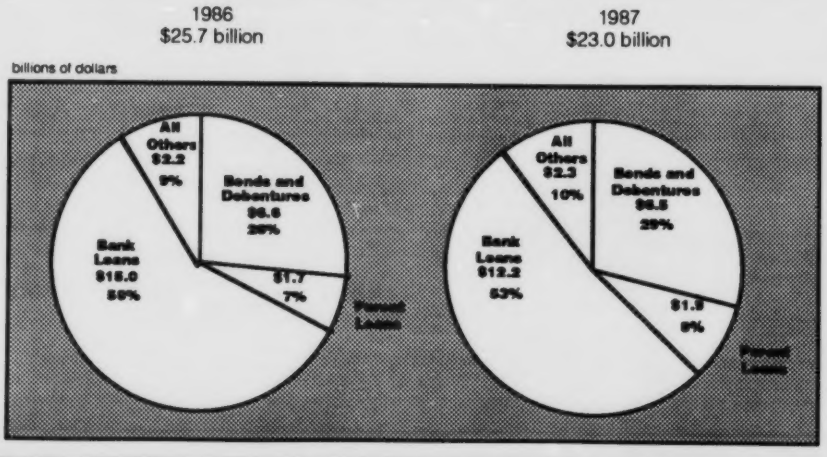
Notes:
(a) Includes common shares, contributed surplus and retained earnings.
(b) Excludes minority interest as detailed in Appendix A24.

Long-Term Debt

In 1987, the long-term debt of the Canadian petroleum industry decreased $2.7 billion or 11% to $23 billion, with a decline of $3.1 billion in bank loans being of principal importance (Appendix A24). Canadian-controlled companies recorded a $3 billion decline in debt largely as a result of the reorganization of a company into a number of separate publicly traded companies. This caused a substantial reduction in the overall industry's long-term assets, fixed assets, long-term debt and retained earnings. Long-term debt was further reduced when it was paid off in part following the acquisition of several heavily-indebted companies. In addition, Canadian-controlled companies sold producing assets with the view of reducing debt. Foreign-controlled companies, with a considerably lower debt level, reported a $265 million increase in their long-term debt, primarily by increasing bond and debenture obligations and borrowings from parent companies.

The bank loan component of long-term debt represented 53% of total debt, down from 60% in 1986. Approximately 60% of this debt was raised at floating interest rates, based on Canadian or U.S. prime or LIBOR (Appendix A24).

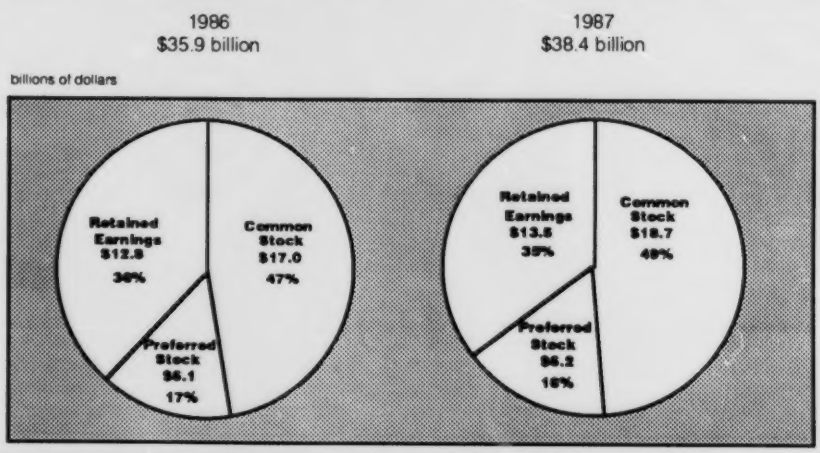
Chart 11.
Industry Long-Term Debt Structure



Equity

Shareholders' equity in the Canadian petroleum industry rose 7% in 1987, up $2.4 billion from 1986. The increase in equity occurred in all categories with common stock rising $1.7 billion to $18.7 billion in 1987 as a result of new issues placed by a number of Canadian-controlled companies, retained earnings growing $705 million to $13.5 billion and preferred shares increasing $120 million to $6.2 billion. As a consequence of these changes, the relative mix of equity forms shifted towards common stock by 2 percentage points in 1987, with a corresponding reduction of 1 percentage point each in the retained earnings and preferred stock component of the industry's overall capital structure.

Chart 12.
Industry Equity Structure



The takeover of Dome Petroleum by Amoco Canada, Canterra Energy by Husky Oil, and the partial purchase of Bow Valley Industries by British Gas have the following comparative effects on the debt and equity structure of the petroleum industry for 1988 compared with 1987 data.

The proforma between 1987 and 1988 indicate that while relatively small changes will occur in terms of Canadian-controlled and foreign-controlled equity, major changes will take place in terms of long-term debt. Canadian-controlled long-term debt is expected to fall to less than half from $15.7 billion to $7.5 billion compared with that for foreign-controlled companies which is expected to more than double from $7.3 billion to $15.1 billion.

In billions of dollars	Canadian-Controlled		Foreign-Controlled	
		Proforma		Proforma
	1987	1988	1987	1988
Long-Term Debt	15.7	7.5	7.3	15.1
Total Equity	19.8	20.7	18.6	20.3
Capital Employed	**35.5**	**28.2**	**25.9**	**35.4**

6

Income Tax-Related Data: 1987 vs. 1986

Taxable Income and Income Taxes Payable

Taxable income of the petroleum industry rose 52% to $3.9 billion in 1987 from $2.6 billion in 1986 due to the partial recovery of crude oil prices from the weakest financial performance in the recent history of the petroleum industry. Consequently, income taxes payable to federal and provincial governments almost doubled in 1987 to $1.3 billion.

Federal taxes payable rose 76% or $500 million to $1.2 billion. The increase would have been larger had it not been for the reduction in the surtax from 5% in 1986 to 3% in 1987, and the lower federal tax rate of 45% effective July 1, 1987, down one percentage point. Provincial taxes payable rose to $170 million in 1987, up $150 million over the $20 million recorded in 1986. The increase in the annual maximum per corporation of the Alberta Royalty Tax Credit to $3 million from $2.8 million in 1986 kept provincial taxes payable from rising even further in 1987.

Table 16.
Taxable Income and Income Taxes Payable in billions of dollars

	1986	1987	Change	Change %
Canadian-Controlled Companies				
Taxable Income	**0.67**	**1.19**	**0.52**	**77**
Income Taxes Payable:				
Federal	0.13	0.29	0.16	120
Provincial	- 0.07	- 0.04	0.03	-
Income Taxes Payable	**0.06**	**0.25**	**0.19**	**284**
Foreign-Controlled Companies				
Taxable Income	**1.87**	**2.70**	**0.83**	**44**
Income Taxes Payable:				
Federal	0.52	0.86	0.34	65
Provincial	0.08	0.21	0.13	157
Income Taxes Payable	**0.61**	**1.08**	**0.47**	**77**
Total Industry				
Taxable Income	**2.55**	**3.89**	**1.34**	**52**
Income Taxes Payable:				
Federal	0.65	1.15	0.50	76
Provincial	0.02	0.17	0.05	969
Total Income Taxes Payable	**0.67**	**1.32**	**0.65**	**97**

Reconciliation of Book Income to Taxable Income

Book net income for the petroleum industry rose to $4.1 billion in 1987 from $1 billion in 1986 largely due to the relative improvement in crude oil prices and the elimination of the PGRT.

In 1987 foreign-controlled companies reported book profits of $3 billion vs. $1.7 billion in 1986. Foreign-controlled companies reported book deductions that must be added back for tax purposes of $6.3 billion, while deductions for tax purposes rose to $5.8 billion from $4.7 billion in 1986. Taxable income for foreign-controlled companies rose to $2.7 billion in 1987 from $1.9 billion a year earlier.

Canadian-controlled companies reported book profits of $1.1 billion in 1987 following book losses of $600 million in 1986. Non-deductible book expenses added back to income declined from $9.4 billion to $7.4 billion in 1987 largely due to the elimination of the PGRT, lower depreciation and amortization and reduced other additions (mainly reflecting inter-corporate dividends). Deductions for tax purposes rose marginally to $5.7 billion while taxable dividends showed a sharp decline to $1.8 billion from $2.5 billion in 1986. Accordingly, taxable income rose to $1.2 billion in 1987 from $700 million in 1986.

Table 17.
Reconciliation of Book Income to Taxable Income: 1987 vs. 1986
in billions of dollars

	Total Industry		Foreign-Controlled		Canadian-Controlled	
	1986	1987	1986	1987	1986	1987
Book Net Income	**1.0**	**4.1**	**1.7**	**3.0**	**-0.6**	**1.1**
plus[a]:						
PGRT	0.5	–	0.2	–	0.3	–
Depreciation and Amortization	2.9	2.5	1.2	1.3	1.6	1.2
Depletion	1.5	1.6	0.3	0.4	1.3	1.3
Current E&D Expensed	0.9	0.6	0.7	0.6	0.2	–
Non-Deductible Crown Royalties	2.2	2.4	1.1	1.4	1.1	1.0
Other Additions[b]	7.0	6.4	2.1	2.6	4.9	3.9
Total Additions	**15.0**	**13.5**	**5.6**	**6.3**	**9.4**	**7.4**
Income Prior to Tax Deductions	**16.0**	**17.6**	**7.3**	**9.3**	**8.8**	**8.5**
less:						
Capital Cost Allowance	2.4	2.8	1.0	1.4	1.4	1.4
Resource Allowance	1.7	2.2	0.8	1.2	0.9	1.0
Canadian Exploration Expenses	1.2	1.1	0.9	0.7	0.3	0.4
Canadian Development Expenses	1.0	1.0	0.4	0.5	0.6	0.5
Canadian Oil & Gas Property Expenses	0.4	0.5	0.1	0.2	0.2	0.2
Earned Depletion Allowance	0.2	0.3	0.1	0.2	0.1	0.1
All Other Deductions[b]	3.5	3.7	1.4	1.6	2.1	2.1
Total Deductions	**10.4**	**11.6**	**4.7**	**5.8**	**5.6**	**5.7**
Net Income for Tax Purposes	**5.6**	**6.1**	**2.6**	**3.4**	**3.0**	**2.7**
less:						
Non-Capital Losses	0.7	0.7	0.1	0.4	0.6	0.4
Taxable Dividends	3.3	2.3	0.8	0.6	2.5	1.8
Other Deductions	0.2	0.1	–	0.1	0.1	–
plus:						
Current Year Non-Capital Losses	1.1	0.9	0.2	0.3	0.9	0.6
Taxable Income (Tax Base)	**2.5**	**3.9**	**1.9**	**2.7**	**0.7**	**1.2**
Income Tax Payable	0.7	1.3	0.6	1.1	0.1	0.2
Tax Pools Remaining	23.2	24.0	9.5	10.2	13.7	13.8
Non-Capital Losses Remaining	1.5	1.5	0.3	0.2	1.2	1.3

Notes:
(a) The additions represent charges that are not allowable for income tax purposes.
(b) A complete breakdown of these items can be found in Appendices B17-20.

Tax Pools Remaining

The petroleum industry's remaining tax pools[1] (Appendix A25) amounted to $24 billion at the end of 1987, up $800 million from the $23.2 billion at the beginning of the year. The increase in the size of pools was largely due to the purchases of oil and gas producing assets that resulted in the Cumulative Canadian Oil and Gas Property Expenses (COGPE) account increasing $1.2 billion to $4.7 billion. Pools remaining as Cumulative Canadian Exploration Expenses (CCEE) rose $165 million to $2 billion which, together with the rise in COGPE, more than offset declines in Cumulative Canadian Development Expenses (CCDE) of $120 million and reductions in Cumulative Capital Cost Allowances (CCCA) of $410 million.

Tax Expenditures[2]

The partial recovery of crude oil prices in 1987 resulted in an increase in resource profits. Consequently the resource allowance, which represents 25% of resource profits, rose 23% to $2.2 billion in 1987 from $1.7 billion in 1986. The resource allowance is provided to compensate for the non-deductibility of Crown royalties, and in 1987 amounted to 90% of Crown royalties paid.

In 1987 the depletion allowance claimed amounted to $255 million, up slightly from $240 million in 1986. Earned depletion has been eliminated for conventional exploration and development expenditures. However, additions to the earned depletion base of $250 million resulting from qualifying expenditures on oil sands, enhanced recovery projects and heavy crude oil upgraders, maintained the overall balance in 1987 at just above the 1986 level (Appendices B17–20).

The investment tax credit declined by $85 million to $145 million in 1987 while the exploration tax credit rose from $10 million to $20 million in 1987.

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(1) Tax pools are accumulated eligible expenditures available to reduce net income for tax purposes in subsequent years.

(2) The tax system does not permit the petroleum industry to deduct certain costs and allowances in computing taxable income. But, reflecting the unique nature of exploration activities and resource development, the industry is allowed credits, some of which do not apply to other sectors of the economy. Cumulatively these are referred to as tax expenditures. The most important examples of these tax expenditures are accelerated write-offs, resource allowances, depletion allowances and investment tax credits. Other tax expenditures, but of minor importance, are detailed in Appendices B17-20. For a fuller discussion of tax expenditures see "Account of the Cost of Selective Tax Measures", August 1985, Department of Finance.

Table 18.
Selected Tax Expenditures in billions of dollars

	Total Industry		Foreign-Controlled		Canadian-Controlled	
	1986	1987	1986	1987	1986	1987
Resource Allowances	**1.74**	**2.15**	**0.84**	**1.17**	**0.90**	**0.98**
Depletion Allowances	**0.24**	**0.25**	**0.14**	**0.17**	**0.10**	**0.08**
Investment Tax Credit	**0.23**	**0.15**	**0.18**	**0.11**	**0.05**	**0.04**
Mem Item: Provincial Royalties	2.28	2.40	1.17	1.38	1.11	1.02
In Percent Resource Allowances as a % of Provincial Royalites	76	90	72	85	81	96

Appendices

Appendix A Supplementary Data

A1

Year in Review

1988

Jan 26
The Minister of Energy, Mines and Resources (EMR) released a study entitled *Canada-U.S. Free Trade Agreement: An Assessment* which foresaw the major longer run macroeconomic effects on our energy sector to more secure access to the U.S. market for Canadian energy exporters, increased availability of capital for investment in Canadian energy industries, and facilitation of major energy project development to the benefit of domestic energy security.

Jan 28
The Committee responsible for organizing the14th congress of the *World Energy Conference* which will be held in Montreal from September 11-23, 1989 was granted $1 million by the Government of Canada.

Mar
The second issue of the *Natural Gas Monitoring Report* concluded that domestic and export prices received by Alberta's producers converged during the first eleven months of the period November 1986 to October 1987 as both domestic and export prices for long term sales declined. British Columbia's producers received stable prices for domestic sales – marginally higher on average in the second half of the1986-1987 year than they were in the first half. B.C. gas export prices in the long term and interruptible categories exceeded domestic prices and, in total for the year, domestic prices were less than export prices.

Apr 13
The Geological Survey of Canada's Institute of Sedimentary and Petroleum Geology, published by a branch of EMR, under the title *Conventional Oil Resources of Western Canada (Light and Medium)*, estimates that an additional 570 million cubic metres of light and medium crude oil potentially could be discovered in Canada's Western Sedimentary Basin and concluded that a high proportion might be economically recoverable.

May 3
The Minister of EMR announced the *Canadian Exploration Incentive Program* (CEIP), an initiative within the framework of the flow-through shares plan. The Program went into effect on October 1, 1988 for oil and gas exploration and will continue until it is reviewed (renewal is possible) on December 31, 1990. It will pay over $210 million per year in total to the mining, and oil and gas industries, and is targeted to ease the financing of junior exploration companies. Eligible companies will be able to claim 30% of their exploration expenses up to a maximum of $10 million.

Jul 18
The Prime Minister of Canada and the Premier of Newfoundland signed a "Statement of Principles" with the Hibernia consortium to proceed with development of the offshore field.

A1
(continued)

Aug 4
The Minister of Energy, Mines and Resources released "Energy and Canadians: Into the 21st Century", the report of the Advisory Committee on Energy Options.

Sep 2
The governments of Canada, Alberta and Saskatchewan signed a binding agreement with Husky Oil Ltd. to finance, build and operate a $1 billion crude oil upgrader located near Lloydminister on the Alberta-Saskatchewan border.

Sep 13
The Minister of Energy, Mines and Resources released the third monitoring report on the performance of domestic and export prices for natural gas. The report concludes that from November 1987 to April 1988, Canadian consumers of domestic natural gas production continued to benefit from prices below those available to export buyers.

Sep 22
The Government of Canada and that of British Columbia agreed on a funding formula that will assist in the construction of a natural gas pipeline making that commodity available in over 20 communities on Vancouver Island and the upper mainland coast.

Sep 24
A Statement of Principles was signed by the Government of Canada and that of Alberta and the members of the Other Six Leases Operation (OSLO) consortium to proceed with the development of the $4 billion integrated oil sands project about 80 km north of Fort McMurry in northeastern Alberta. The project when completed in 1996, is expected to produce 77,000 barrels (12,000 cubic metres) of oil per day.

Oct 31
Alberta's Energy Minister announced extension of the three-year royalty holiday and retention of the current terms of the Alberta royalty tax credit program.

A2 Petroleum Supply and Demand Summary[a][b]

First six months

	1987	1988	Change
	thousands m^3/day		%
Production			
Crude Oil	253	269	7
Natural Gas Liquids[c]	40	44	10
Total Production	**293**	**313**	**7**
Net Exports[d]			
Crude Oil	42	49	16
Natural Gas Liquids	12	16	40
Refined Products	5	21	310
Total Net Exports	**59**	**86**	**46**
Consumption			
Natural Gas Liquids	33	37	13
Refined Products	224	231	4
Total Consumption	**257**	**268**	**5**

Notes:

(a) Petroleum includes conventional and synthetic crude oil and natural gas liquids (propane, butane and ethane) derived from gas plants and gas reprocessing plants. Data on the production, net exports and consumption do not represent a complete supply/demand balance as industry's own use and stock changes are not shown.

(b) Figures represent total industry activity and are derived from a number of sources:
- Production – Statistics Canada (Catalogue 26-006)
- Net Exports – EMR Oil Supply Branch
- Consumption – Statistics Canada (Catalogue 45-004)

(c) Does not include refinery production of 9.1 thousand m^3/d in 1988 and 8.0 thousand m^3/d in 1987.

(d) On a gross basis, petroleum imports (including exchange receipts) for 1987 and 1988 were 56,500 m^3/d and 68,300 m^3/d (355,500 b/d and 429,800 b/d) respectively, or 22% and 25% of domestic consumption in those periods.

A3 Natural Gas Supply and Demand Summary[a]

First six months

	1987	1988	Change
	millions m^3/day		%
Production			
Gross New Production	308	358	16
Less:			
Injected, Shrinkage and Adjustments	70	75	7
Indigenous Supply	238	283	19
Less:			
Producer Consumption	28	31	11
Marketable Production	**210**	**252**	**20**
Net Exports	**71**	**99**	**39**
Consumption			
Energy Use	136	153	11
Non-energy Use	11	13	17
Converted to Electricity and Other	– 8	– 13	–
Total Consumption	**139**	**153**	**10**
NEB Export Authorization	**152**	**152**	**–**

Note:

(a) Figures represent total industry activity and are derived from a number of sources:
- Production – Statistics Canada (Catalogue 26-006)
- Net Exports – EMR Oil Supply Branch
- Consumption – Statistics Canada (Catalogue 45-004)

A4 Canadian Natural Gas Prices: 1974-1988 in dollars per gigajoule

	Field Gate Including Export Flow Back	Alberta Border	Toronto City Gate	Weighted Ontario Sales Realization	Ontario Market		
					Residential	Commercial	Industrial
1974	–	0.28	0.55	0.83	1.26	0.94	0.64
1975	–	0.53	0.82	1.13	1.56	1.21	0.94
1976	0.98	0.84	1.24	1.61	2.04	1.69	1.40
1977	1.21	1.04	1.47	1.85	2.44	1.96	1.37
1978	1.44	1.28	1.77	2.14	2.74	2.22	1.90
1979	1.66	1.36	1.92	2.35	3.03	2.43	2.06
1980	2.30	1.61	2.23	2.69	3.43	2.73	2.36
1981	2.34	1.75	2.42	3.40[a]	4.24	3.41	3.03
1982	2.53	2.01	2.80	4.16[a]	4.93	4.12	3.70
1983	2.48	2.48	3.38	4.74[a]	5.72	4.78	4.15
1984	2.61	2.78	3.71	4.77	5.79	4.86	4.16
1985	2.47	2.80	3.76	4.76	5.83	4.89	4.13
1986[b]	2.32	2.80	3.78	4.71	6.09	4.86	4.03
1987							
Jan				4.56	5.33	4.48	3.84
Feb				4.63	5.45	4.61	3.76
Mar				4.60	5.53	4.66	3.75
Apr				4.54	5.69	4.69	3.72
May				4.48	6.03	4.75	3.70
Jun				4.31	6.53	4.84	3.61
Jul				4.37	6.71	4.86	3.66
Aug				4.27	6.89	4.86	3.57
Sep				4.28	6.73	4.77	3.57
Oct				4.40	5.94	4.75	3.59
Nov				4.53	5.70	4.69	3.68
Dec				4.60	5.59	4.67	3.71
Average				4.46	6.01	4.72	3.68
1988							
Jan				4.63	5.48	4.64	3.69
Feb				4.57	5.49	4.62	3.53
Mar				4.57	5.51	4.57	3.64
Apr				4.38	5.53	4.58	3.32
May				4.38	5.85	4.65	3.50
Jun				4.08	6.01	4.29	3.45

Notes:

(a) The rising average sales realizations for the years 1981 to 1983 reflect the imposition of the Natural Gas and Gas Liquids Tax.

(b) Effective November 1, 1986, a new gas agreement between the federal and provincial governments provided for the deregulation of natural gas prices and markets. As a result, the price of natural gas in domestic markets is now subject to the interplay between buyers and sellers.

A5 Canadian Crude Oil Prices: 1979-1988

	Conventional Crude Oil Wellhead Price[a]		Petroleum Compensation & Other Charges		Cost of Crude Oil Exclusive of Transportation[b]		Refiner Acquisition Cost at Montreal	
	$/bbl	$/m³	$/bbl	$/m³	$/bbl	$/m³	$/bbl	$/m³
1979								
Jan 1	12.75	80.23	0.33	2.08	13.08	2.31	14.13	88.92
Jul 1	13.75	86.53	0.33	2.08	14.08	88.61	15.13	95.21
Sep 1	13.75	86.53	0.50	3.15	14.25	89.68	15.30	96.28
Nov 1	13.75	86.53	0.85	5.35	14.60	91.88	15.65	98.49
1980								
Jan 1	14.75	92.83	0.85	5.35	15.60	98.18	16.65	104.78
Aug 1	16.75	105.41	1.75	11.01	18.50	116.42	19.73	124.16
Nov 1			2.55	16.04	19.30	121.45	20.53	129.20
1981								
Jan 1	17.75	111.70	5.05	31.77	22.80	143.47	24.07	151.47
1982								
Jan 1	23.50	147.89	7.45	46.89	30.95	194.78	32.54	204.77
1983								
Jan 1	29.75	187.22	4.91	30.89	34.66	218.11	35.79	225.25
1984								
Nov 10	29.75	187.22	7.69	48.39	37.44	235.61	39.44	248.21
1985								
Jun 1	36.40	229.06					38.30	241.02
Dec	37.06	233.22					38.99	245.36
1986								
Jan	32.79	206.34					34.76	218.93
Feb	22.20	139.70					24.18	152.16
Jul	14.60	91.88					16.58	104.34
Dec	19.23	121.01					21.30	134.04
1987								
Jan	22.74	143.10					24.87	156.51
Feb	21.94	138.07					24.17	152.10
Mar	20.36	128.13					22.48	141.47
Apr	21.90	137.80					24.05	151.35
May	23.13	145.56					25.28	159.09
Jun	23.96	150.78					26.11	164.31
Jul	25.17	158.39					27.32	171.92
Aug	25.10	157.95					27.25	171.48
Sep	23.09	145.31					25.28	159.09
Oct	23.25	146.31					25.44	160.09
Nov	23.09	145.31					25.28	159.09
Dec	20.95	131.84					23.14	145.62
1988								
Jan	19.44	122.34					21.60	135.93
Feb	19.02	119.69					21.17	133.22
Mar	17.67	111.20					19.81	124.66
Apr	19.10	120.20					21.23	133.60
May	19.43	122.27					21.56	135.68
Jun	18.43	115.98					20.55	129.32
Jul	16.20	101.95					18.32	115.29

Notes:

(a) Starting June 1, 1985, i.e. following deregulation, the wellhead price shown here is the Edmonton purchase price less estimated gathering costs of approximately $3.90/m³ (62¢/bbl).

(b) Gathering and transportation costs, and charges as applicable, make up the difference between the wellhead price and the refiner acquisition cost at Montreal. These costs amounted to $13.34/m³ ($2.12/bbl) on June 1, 1988.

A6 Average Crude Oil Refiner Acquisition Costs by Region

in dollars per cubic metre[1]

	British Columbia	Prairie Provinces	Ontario	Quebec[2]	Atlantic[2]	Total Canada
1985						
Dec	241.96	234.47	241.77	244.48	252.60	242.10
1986						
Jan	225.22	210.50	234.03	242.48	246.43	230.49
Feb	174.94	144.86	207.92	218.90	218.24	193.64
Jul	105.72	95.28	116.99	108.92	102.45	106.79
Dec	127.24	126.42	128.82	132.35	132.59	128.97
1987						
Jan	137.44	146.44	134.34	140.90	145.24	140.15
Apr	144.48	140.71	146.69	151.60	154.80	148.78
Jul	158.14	160.84	162.40	164.21	163.55	161.66
Oct	155.37	150.46	157.41	155.23	154.80	154.56
1988						
Jan	140.84	125.80	141.49	141.51	143.73	138.01
Feb	133.92	123.34	134.14	136.80	139.70	131.96
Mar	123.91	114.66	128.33	127.56	126.62	124.10
Apr	124.29	124.22	124.86	123.18	125.67	124.35
May	126.80	127.06	127.72	126.16	126.49	127.06
Jun	127.37	116.23	128.66	125.32	122.59	124.10
Jul	123.72	105.92	122.02	117.99	115.61	116.11
Aug	116.46	107.30	116.50	118.09	117.99	114.27

(1) The variation in average refiner acquisition cost by region is due to quality differences and the lag time between the actual purchase and delivery dates. Assuming an estimated delivery time from Edmonton to Montreal of six weeks, receipts of any given month at Montreal reflect a mixture of crude purchases made during the two previous months.

(2) The exact average cost of crude oil imports is not available for Quebec and the Atlantic region due to confidentiality considerations. Therefore, the average cost of imports for total eastern Canada has been used to determine the regional averages for Quebec and Atlantic.

A7 Average Crude Oil Transporation Costs from Edmonton

in dollars per cubic metre[1]

	Vancouver	Regina	Sarnia	Toronto	Montreal
1985					
Dec	5.10	1.45	6.98	7.43	8.50
1986					
Jan-Jul	5.10	1.64	7.17	7.61	8.81
Aug	5.10	1.65	7.17	7.61	8.87
Sep-Oct	5.10	1.80	7.42	7.92	9.25
Nov-Dec	4.47	1.80	7.42	7.92	9.25
1987					
Jan	4.47	1.95	7.68	8.24	9.75
Apr	4.47	1.95	7.49	8.04	9.56
Jul	4.47	1.95	7.55	8.12	9.63
Oct	4.69	2.07	7.68	8.30	9.82
1988					
Jan	6.29	2.05	7.55	8.12	9.63
Feb	6.29	2.05	7.48	8.12	9.63
Mar	6.29	2.05	7.42	8.04	9.56
Apr	6.29	2.05	7.42	8.04	9.56
May	6.29	2.05	7.42	8.04	9.56
Jun	6.29	2.05	7.36	7.98	9.48
Jul	6.29	2.05	7.32	7.94	9.44
Aug	5.78	2.05	7.38	8.00	9.50

Source:
Energy, Mines and Resources Canada, Oil Branch

(1) Includes pipeline tariffs and pipeline losses but excludes trucking charges.

A8 **Canadian Acquisition Costs vs. Product Prices** in cents per litre

	Average Unit Revenue from Total Petroleum Product Sales[1]	Average Refiner Acquisition Cost (Unit) (lagged 60 days)[2]	Differential (To cover R&M Costs and Profits, Retail Margin and FST + FET
1985			
Dec	33.74	24.47	10.27
1986			
Jan	34.37	23.09	11.26
Feb	34.25	23.06	11.19
Mar	31.82	23.05	8.77
Apr	27.93	19.36	8.57
May	25.82	14.53	11.29
Jun	25.72	11.73	13.99
Jul	24.91	11.73	13.18
Aug	23.91	11.78	12.13
Sep	23.84	10.68	13.16
Oct	23.71	11.10	12.61
Nov	23.58	12.03	11.55
Dec	23.34	12.50	10.84
1987			
Jan	22.74	12.48	10.26
Feb	23.86	12.90	10.96
Mar	24.08	14.02	10.06
Apr	24.20	14.77	9.43
May	23.38	14.32	9.06
Jun	24.34	14.68	9.66
Jul	24.54	15.00	9.54
Aug	24.79	15.49	9.30
Sep	25.14	16.17	8.97
Oct	24.65	16.44	8.21
Nov	25.00	15.89	9.11
Dec	24.99	15.45	9.54
1988			
Jan	24.43	15.46	8.97
Feb	23.98	14.69	9.29
Mar	23.63	13.80	9.83
Apr	23.31	13.20	10.11
May	22.88	12.41	10.47
Jun	22.62	12.43	10.19

Sources:
(1) Statistics Canada, Prices Division
(2) Energy, Mines and Resources Canada, Oil Branch

A9 Average Net Prices for Selected Major Petroleum Products and Trade Classes by Region in cents per litre[1]

First six months

	1987	1988	Change[2] %
Regular Unleaded Gasoline – Branded Retail			
Atlantic	29.9	29.7	– 0.6
Quebec	29.7	29.6	– 0.4
Ontario	26.0	26.2	0.7
Prairies	28.4	25.6	– 9.8
Pacific	28.0	26.6	– 5.0
Total Canada	27.8	27.3	– 1.7
Diesel Fuel – Commercial and Industrial			
Atlantic	21.4	21.5	0.4
Quebec	20.9	20.1	– 3.7
Ontario	20.5	20.7	0.9
Prairies	20.4	20.1	– 1.3
Pacific	21.1	21.9	3.7
Total Canada	20.7	20.7	–
Light Fuel Oil – Branded Retail			
Atlantic	26.9	27.5	2.2
Quebec	24.5	26.5	8.1
Ontario	28.1	29.9	6.4
Pacific	27.2	29.7	9.0
Total Canada	26.7	28.4	6.2
Heavy Fuel Oil # 6 – All trade classes			
Atlantic	13.4	11.4	– 15.0
Quebec	12.7	10.5	– 17.3
Ontario	11.5	11.4	– 0.7
Pacific	12.2	10.1	– 17.1
Total Canada	12.5	10.7	– 14.4
Total Petroleum Products[3] – All trade classes			
Atlantic	22.7	23.2	2.2
Quebec	22.9	22.3	– 2.5
Ontario	23.9	23.2	– 3.0
Prairies	24.3	23.6	– 2.7
Pacific	24.4	23.9	– 2.1
Total Canada	23.7	23.4	– 1.3

Source:
Statistics Canada, Prices Division

(1) Weighted average prices shown were derived from volumes and sales revenue data reported through a survey of major refiners for a wide range of finely specified products and trade classes. The prices are net of provincial road taxes, federal sales and excise taxes, and dealer margins.

(2) This represents the change in net prices compared to the year earlier period.

(3) This represents the summation of petroleum products from the sample selection reported to Statistics Canada in their survey.

A10 Petroleum Product Prices for Selected Major Products Sold to Private Brand Resellers

First six months

	1987		1988	
	Price ¢ / litre	Market Share[1] %	Price ¢ / litre	Market Share[1] %
Premium Unleaded Gasoline				
Quebec	24.0	10.5	21.4	9.4
Ontario	23.1	11.1	21.6	10.7
Prairies	23.7	5.6	19.3	4.4
Regular Unleaded Gasoline				
Quebec	22.9	11.5	19.8	10.9
Ontario	22.1	19.8	19.9	20.1
Prairies	21.6	12.6	20.4	9.4
Regular Leaded Gasoline				
Quebec	20.4	19.1	18.5	18.8
Ontario	20.3	24.1	19.2	25.4
Prairies	20.7	14.9	18.5	12.4
Diesel Fuel				
Quebec	19.1	16.2	18.3	15.2
Ontario	19.1	9.3	18.6	12.9
Light Fuel Oil				
Quebec	18.1	30.7	18.3	31.1
Ontario	17.9	32.4	19.1	28.8
Pacific	23.4	10.2	23.2	15.2

Source:
Statistics Canada, Prices Division

(1) Reflects an estimated market share of sales by reporting refiners, excluding product imports.

A11 Oil Products Sales Volumes – Refiners and Marketers

in millions of cubic metres
First six months

	Nationals			Regionals			Total		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Clean Products	23.7	23.7	–	9.1	9.0	–	32.8	32.7	–
Heavy and Specialty Products	5.2	5.3	1	1.7	2.0	20	6.9	7.3	6
Total Sales	**28.9**	**29.0**	**–**	**10.7**	**11.0**	**3**	**39.7**	**40.0**	**1**
Less: Exports	1.7	1.6	–1	1.2	0.9	–2	2.9	2.5	–14
Gross sales in Canada	**27.2**	**27.4**	**–1**	**9.5**	**10.1**	**5**	**36.7**	**37.5**	**2**
Less: Sales to Other Refiners	0.9	1.0	14	0.1	0.1	85	1.0	1.2	19
Net Sales in Canada	**26.3**	**26.4**	**–**	**9.5**	**9.9**	**5**	**35.7**	**36.3**	**2**

A12 Net Income by Sector and Segment in millions of dollars

First six months

	1987	1988	Change	Change %
Canadian-Controlled Companies				
Upstream	320	290	-30	-9
Downstream	137	175	38	28
Other Canadian Operations	137	45	-92	-67
Foreign Activities	8	8	-	6
Total Canadian-Controlled	**601**	**518**	**-83**	**-14**
Foreign-Controlled Companies				
Upstream	792	233	-559	-71
Downstream	331	415	84	25
Other Canadian Operations	3	25	22	763
Foreign Activities	67	85	18	28
Total Foreign-Controlled	**1193**	**758**	**-435**	**-36**
Total Industry				
Upstream	1112	523	-589	-53
Downstream	468	590	122	26
Other Canadian Operations	140	70	-70	-50
Foreign Activities	74	93	19	26
Grand Total	**1794**	**1276**	**-518**	**-29**

A13 Rates of Return: Canadian Petroleum Industry in percent

	1983	1984	1985	1986	1987	First Six Months 1988	Five-Year Average ending in 1987	Five-Year Average ending in 1988
Return on Average Capital Employed								
Upstream								
Canadian-Controlled Companies	4.5	6.2	5.1	-3.8	4.4	3.7	3.3	3.1
Foreign-Controlled Companies	14.0	11.4	9.5	3.8	8.6	4.6	9.4	7.6
Total Industry	8.1	8.4	6.9	-0.8	6.0	4.1	5.7	4.9
Downstream[a]								
Canadian-Controlled Companies	-2.4	3.9	-1.8	5.9	3.4	4.4	1.8	3.2
Foreign-Controlled Companies	0.8	4.0	3.2	7.5	9.7	7.4	5.0	6.4
Total Industry*	-0.1	4.0	1.4	6.8	6.5	6.2	3.7	5.0
Total Operations[b]								
Canadian-Controlled Companies	2.2	6.1	3.9	-4.2	4.8	4.4	2.5	3.0
Foreign-Controlled Companies	8.2	8.3	7.2	4.4	8.4	6.0	7.3	6.8
Total Industry	4.9	7.1	5.2	-0.8	6.3	5.3	4.5	4.6
*Memo:								
National Refiners/Marketers	-1.1	3.3	0.8	6.6	6.6	5.4	3.2	4.5
Regional Refiners/Marketers	3.3	6.2	2.8	7.4	6.3	8.3	5.2	6.2
Return on Average Equity								
Canadian Operations								
Canadian-Controlled Companies	-2.0	5.9	3.5	-14.5	5.3	5.2	-0.4	1.1
Foreign-Controlled Companies	11.9	12.7	11.1	5.9	12.6	7.4	10.8	9.9
Total Industry	5.2	9.5	7.1	-4.8	8.9	6.2	5.2	5.4
Total Operations[b]								
Canadian-Controlled Companies	-3.2	6.6	3.6	-18.4	5.3	5.2	-1.2	0.5
Foreign-Controlled Companies	11.9	12.7	11.0	5.9	12.6	7.9	10.8	10.0
Total Industry	4.6	9.8	7.1	-7.1	8.8	6.5	4.6	5.0

Notes:

(a) Downstream here represents oil products operations only, i.e. it excludes petrochemical and other downstream operations.

(b) Upstream, downstream (here also includes petrochemicals and other downstream activities), other Canadian and foreign operations.

A14 Rates of Return: Petroleum and Other Industries in percent[a]

	1983	1984	1985	1986	1987	First Six Months 1988	Five-Year Average ending in 1987	Five-Year Average ending in 1988
Return On Shareholders Equity[b]								
Petroleum	5.0	9.9	9.3	-5.9	10.0	7.9	6.0	6.0
Other Non-Financial	8.9	10.8	9.7	9.6	10.6	13.0	9.1	10.4
Manufacturing	9.5	12.1	10.2	10.5	12.4	17.4	9.8	12.0
Mining	1.6	2.2	0.7	1.2	5.2	9.9	1.5	3.5
Other Industries	10.0	11.5	11.3	10.5	9.9	9.0	10.3	10.3
Return On Capital Employed[c]								
Petroleum	4.7	7.2	6.7	-0.5	6.9	6.0	5.3	5.2
Other Non-Financial	7.1	8.2	7.6	7.4	8.0	9.1	7.3	7.9
Manufacturing	8.0	9.7	8.4	8.5	9.6	12.4	8.1	9.4
Mining	1.9	3.4	1.9	2.2	5.0	7.7	3.1	3.7
Other Industries	7.3	8.0	7.9	7.5	7.2	6.5	7.5	7.4

Source: Statistics Canada 61-003, Industrial Corporations Quarterly

Notes:
(a) Information on Table 3 is based on PMA data as per Appendix A14.
(b) Return on equity is defined as net profit after tax and extraordinary items, divided by average book equity. It measures the rate of return on shareholders' investment (paid-in capital and retained earnings). This measure is often used to compare the performance of companies that may vary by type and by size.
(c) Capital employed is defined as total assets, less current liabilities. The net income figures used to compute rate of return on capital employed have been adjusted by adding the after-tax interest expense on borrowed funds.

A15 Reinvestment Rates in percent

First six months

	Total[a] 1987	Total[a] 1988	Upstream[b] 1987	Upstream[b] 1988	Upstream[c] plus Downstream 1987	Upstream[c] plus Downstream 1988
Integrateds & Refiners	40	64	53	93	42	65
Oil and Gas Producers						
Senior Producers	71	101	59	100	60	97
Junior Producers	101	154	89	145	102	174
Total Oil and Gas Producers	81	119	68	113	72	120
Total Industry	**61**	**93**	**62**	**107**	**57**	**93**
Canadian-Controlled	72	104	64	109	65	106
Foreign-Controlled	54	85	61	105	53	84

Notes:
(a) Total capital expenditures (net of incentive grants) as a percentage of total internal cash flow. The calculations do not reflect changes in inventories. Had changes in the cost of inventories been included, the reinvestment rate would have been 84% in the first half of 1988 vs. 66% in 1987.
(b) Upstream capital expenditures (net of incentive grants) in Canada as a percentage of upstream cash flow.
(c) Net upstream plus downstream ('petroleum-related') capital expenditures in Canada as a percentage of internal cash flow generated by petroleum-related activities.

A16 Gross Exploration Expenditures in Canada – by Area in millions of dollars

First six months

	1987	1988	Change %
Provincial Lands			
British Columbia	62	121	94
Alberta	866	1127	30
Saskatchewan	59	87	48
Other Provinces	6	8	34
Total Provincial Lands	**993**	**1343**	**35**
Canada Lands			
Beaufort Sea	20	123	526
Labrador East	77	91	17
Atlantic Shelf South	24	46	95
Other Canada Lands	28	21	– 24
Total Canada Lands	**149**	**281**	**89**
Total Canada	**1142**	**1624**	**42**

A17 Incentives Grants by Area and Type of Expenditure in millions of dollars

First six months

	Exploration	Development and Production	Total	Canadian-Controlled	Foreign-Controlled
British Columbia					
1987	–	–	–	–	–
1988	4	5	9	3	6
Alberta					
1987	24	9	33	19	14
1988	64	54	117	62	55
Saskatchewan					
1987	2	2	4	4	–
1988	5	10	15	12	3
Other Provinces					
1987	1	–	1	–	1
1988	3	1	3	1	2
Beaufort Sea					
1987	7	–	7	6	1
1988	– 1	–	– 1	– 2	–
Labrador East					
1987	32	–	32	8	24
1988	2	–	2	–	2
Atlantic Shelf South					
1987	3	–	3	2	1
1988	6	–	6	5	–
Other Canada Lands					
1987	15	–	15	14	1
1988	–	–	–	–	–
Total					
1987	85	11	96	54	42
1988	82	69	152	82	70

Note:
PIP grants were incentives to qualifying enterprises carrying out exploration, development and production activities in Canada. The Government of Alberta administered and funded the grants for activities within that province, and the Government of Canada administered and funded the program elsewhere in Canada.

A18 Well Completions and Metres Drilled in Canada

First six months

	Exploratory			Development		
	1987	1988	Change %	1987	1988	Change %
Well Completions in number of wells						
British Columbia	35	51	45	31	67	116
Alberta	816	1222	50	1068	2013	88
Saskatchewan	104	297	185	229	752	228
Other Provinces	18	44	144	38	48	26
Northern Canada[a]	3	5	67	14	7	- 50
Offshore[b]	3	1	- 67	–	–	–
Total	**979**	**1620**	**65**	**1380**	**2887**	**109**
Metres Drilled in thousands						
British Columbia	72	102	42	52	110	112
Alberta	1308	1767	35	1345	2103	56
Saskatchewan	114	282	147	217	675	211
Other Provinces	12	33	175	24	47	96
Northern Canada[a]	9	11	22	12	10	- 17
Offshore[b]	12	4	- 67	–	–	–
Total	**1527**	**2199**	**44**	**1650**	**2945**	**79**

Source:
Oilweek, July 18, 1988

Notes:
(a) All areas in Canada North of 60°, including Hudson Bay.
(b) East coast and West coast offshore areas.

A19 Comparison of Interest Charges with Income before Taxes: 1988

in millions of dollars[a]
First six months

	(1) Income Before interest and Taxes	(2) Interest Charges Incurred	(3) Interest Coverage Ratio times
Integrateds and Refiners	1677	216	7.8
Oil and Gas Producers			
Senior Producers	1176	613	1.9
Junior Producers	392	288	1.4
Total Oil and Gas Producers	1569	900	1.7
Total Industry	**3246**	**1116[b]**	**2.9**
Canadian-Controlled	1143	389	2.9
Foreign-Controlled	2102	727	2.9

Notes:
(a) The figures in Column 1 represent the total of income from total operations before taxes and expensed interest. Column 2 shows total interest charges incurred (both expensed and capitalized). Column 3 is the ratio of Column 1 to Column 2.
(b) In addition to the $1.1 billion of interest charges expensed in the first six months of 1988, $45 million was capitalized (mostly by Canadian-controlled companies).

A20 Dividend Payments

First six months

	1987	1988	1987	1988
	$ millions		% of net income[a]	
Integrateds and Refiners	374	338	39	39
Oil and Gas Producers				
Senior Producers	292	280	39	94
Junior Producers	68	63	74	54
Total Oil and Gas Producers	360	343	43	83
Total Industry	**734**	**681**	**41**	**53**
Canadian-Controlled	250	240	42	46
Foreign-Controlled	484	441	41	58

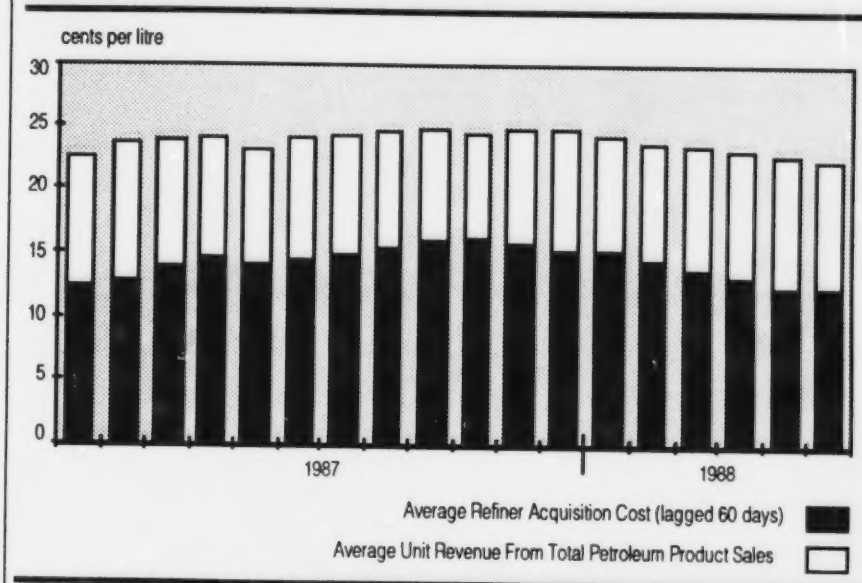
Note:
(a) Derived by dividing dividend payments for each company group by their net income on total operations (Appendices B1-7).

A21 Income and Expense Statement: 1979 – 1988 First Six Months as percent of revenues

	1979	1980	1981	1982	1983	1984	1985	1986	1987	First Six Months 1988
Upstream										
Revenues	100	100	100	100	100	100	100	100	100	100
Royalties and other Payments	31	31	29	27	25	24	23	18	17	16
PGRT and other Taxes	–	–	6	9	8	8	7	3	–	–
Interest Expenses	n/a	n/a	6	7	6	6	6	10	9	9
Operating Costs and other Cash Items	20	21	21	20	18	18	20	33	29	35
Current Income Tax	8	6	8	9	11	11	11	5	6	3
Cash Flow	40	42	30	28	31	32	34	31	38	36
Depreciation, Depletion and Amortization	7	8	8	8	12	10	11	23	21	25
Other Non-cash Charges	8	9	8	5	4	3	3	6	4	2
Deferred Income Tax	6	7	5	5	5	7	6	–	2	3
Extraordinary Gains	–	–	–	–	–	–	– 3	– 12	1	–
Net Income	19	18	10	10	11	12	10	– 11	12	6
Downstream										
Revenues	100	100	100	100	100	100	100	100	100	100
PGRT and other Taxes	5	7	6	6	6	6	7	11	14	17
Cost of Goods Sold	71	69	75	80	83	80	79	68	64	59
Interest Expenses	n/a	n/a	1	1	1	1	1	–	–	–
Operating Costs and other Cash Items	13	11	9	10	10	9	10	13	13	13
Current Income Tax	2	4	3	-1	-1	–	–	2	2	3
Cash Flow	9	9	7	4	2	3	3	6	6	7
Depreciation, Depletion and Amortization	2	2	1	2	2	2	2	3	3	3
Other Non-cash Charges	–	–	–	–	–	–	–	–	–	–
Deferred Income Tax	2	1	1	1	1	–	–	–	–	–
Extraordinary Gains	–	–	–	–	–	–	–	– 1	–	–
Net Income	5	6	4	1	–	1	1	3	3	4

A22 Canadian Crude Oil Acquisition Costs vs. Petroleum Product Prices

First six months



During the first six months of 1988 the difference between average refined product prices (excluding provincial sales tax) and average refiner acquisition costs of crude oil ranged from a low of 9¢ to a high of 10.5¢ per litre. The corresponding 1987 figures were slightly higher with a range of 9.1¢ to 11¢ per litre.

A23 International Flows of Funds: 1987 in millions of dollars

	Current Account				Capital Account			
	Interest	Dividends	Business Service Payments	Total	Direct	Other	Total	Grand Total
International Transactions Related to Long-Term Investments in Canada								
Canadian-Controlled	– 415	– 102	– 21	– 538	–	– 285	– 285	– 823
Foreign-Controlled	– 295	– 587	194	– 1076	506	1336	1842	766
Inflows (Outflows)	**– 710**	**– 689**	**– 215**	**– 1615**	**506**	**1051**	**1557**	**– 57**
International Transactions Related to Long-Term Investments Abroad								
Canadian-Controlled	27	170	53	250	116	44	160	410
Foreign-Controlled	7	4	38	49	– 33	–	– 33	16
Inflows (Outflows)	**34**	**174**	**91**	**298**	**83**	**44**	**127**	**426**
Total								
Canadian-Controlled	–388	68	32	– 288	116	– 241	– 125	– 413
Foreign-Controlled	– 288	– 583	– 156	– 1027	473	1336	1809	782
Inflows (Outflows)	**– 676**	**– 515**	**– 124**	**– 1315**	**589**	**1094**	**1684**	**369**
International Transactions Related to Short-Term Investments								
Canadian-Controlled					7	– 180	– 173	– 173
Foreign-Controlled					352	234	586	586
Inflows (Outflows)					**359**	**54**	**413**	**413**

Note:
Direct transactions are those which are between related companies (non-arm's length).

A24 Capital Employed by Component in millions of dollars

	1986			1987		
	Canadian-Controlled	Foreign-Controlled	Total	Canadian-Controlled	Foreign-Controlled	Total
Long-Term Debt						
Bonds, Debentures, etc.	4800	1822	6621	4299	2249	6549
Parent held	465	1208	1673	264	1675	1939
Bank loans	11567	3739	15307	9173	3032	12205
Other	1843	230	2073	1959	310	2268
Total Long-Term Debt	**18675**	**6999**	**25674**	**15695**	**7266**	**22961**
Equity						
Preferred Shares	5284	838	6122	5703	537	6240
Common Shares						
Book Value	10292	3895	14187	11949	3765	15714
Retained Earnings	621	12206	12827	192	13341	13533
Contributed Surplus	2122	831	2953	1989	984	2973
Total Equity Value	**18319**	**17770**	**36089**	**19833**	**18627**	**38460**
Total Capital Employed	**36993**	**24770**	**61763**	**35528**	**25893**	**61421**
Minority Interest	**107**	**270**	**377**	**66**	**296**	**362**
Long-Term Debt by Interest Rate						
Fixed Rate	5651	4239	9891	4864	4172	9036
Floating (Prime or Libor)	13023	2760	15783	10831	3095	13926
– *as percent of the total*	*69.7*	*39.4*	*61.5*	*69.0*	*42.6*	*60.7*

A25 Current Year Deductions and Tax Pools Remaining[1] in millions of dollars

	Canadian-Controlled			Foreign-Controlled		
	Deductions	Remaining Balance	Utilization Rate[2] %	Deductions	Remaining Balance	Utilization Rate[2] %
1986						
CCA	1445	6481	18	968	4832	17
CEE	321	1126	22	890	735	55
CDE	556	1743	24	426	1219	26
Earned Dep.	104	980	10	135	938	13
COGPE	234	1901	10	117	1616	7
FE&D	54	563	9	15	45	25
Total	**2730**	**13690**	**17**	**2560**	**9525**	**21**
1987						
CCA	1405	5892	19	1452	5012	22
CEE	431	1459	23	698	565	55
CDE	535	1694	24	495	1151	30
Earned Dep.	89	982	8	166	936	15
COGPE	235	2364	9	224	2336	9
FE&D	65	532	10	11	73	13
Total	**2760**	**13824**	**17**	**3050**	**10184**	**23**

(1) Abbreviations:

CCA	= Capital Cost Allowance
CEE	= Canadian Exploration Expense
CDE	= Canadian Development Expense
Earned Dep.	= Earned Depletion Allowance
COGPE	= Canadian Oil and Gas Property Expense
FE&D	= Foreign Exploration and Development Expense

Appendix B
Complete Survey Results

B1

Income and Expense Statement – All Operations in millions of dollars
Total Industry
First six months

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Total Revenues	8607	8335	-3.2	12993	13519	4.0	1325	1380	4.1	719	654	-9.1	23644	23887	1.0
Royalties and other Payments	1421	1369	-3.7	0	0	-	0	0	-	0	0	-	1421	1369	-3.7
PGRT and other Taxes	0	0	-	1931	2272	17.7	10	5	-53.1	42	39	-6.9	1983	2316	16.8
Total Revenue after Royalties	7185	6966	-3.1	11062	11247	1.7	1315	1375	4.5	677	615	-9.3	20240	20203	-0.2
Cost of Goods Sold	0	0	-	8155	8034	-1.5	615	434	-29.5	178	135	-24.4	8949	8603	-3.9
Interest Expenses	789	752	-4.7	46	40	-11.3	395	265	-32.8	23	13	-43.1	1252	1070	-14.5
Operating Costs	2247	2538	12.9	1610	1783	10.8	299	427	42.7	155	155	0.5	4311	4903	13.7
R&D Costs (excluding Oil Sands)	24	30	24.9	19	21	7.7	1	0	-91.2	0	1	178.8	45	52	15.4
Other Expenses	241	383	59.0	12	17	41.3	64	96	49.9	34	26	-24.7	351	522	48.6
Oil Sands R&D Expensed	6	11	103.0	0	0	-	0	0	-	0	0	-	6	11	103.0
E&D Expensed	331	442	33.5	0	0	-	13	22	72.7	2	16	-	346	480	38.7
Depreciation	465	532	14.4	359	367	2.3	96	101	5.4	14	35	156.1	933	1035	10.9
Depletion	899	1018	13.3	0	0	-	8	8	1.1	170	132	-22.2	1077	1159	7.6
Write-Offs and Amortization	175	261	48.7	22	8	64.7	-166	-38	-	-19	-38	-	12	193	-
Non-cash Charges and E&D	1876	2265	20.7	381	375	-1.6	-50	93	-	166	145	-12.8	2373	2878	21.3
Income before Taxes	2008	998	-50.3	839	976	16.3	-9	60	-	121	140	15.9	2959	2175	-26.5
Federal Income Tax	555	246	-55.6	206	245	18.8	-164	-1	-	60	36	-39.9	658	527	-19.8
Provincial Income Tax	80	-10	-	63	100	59.1	-35	0	-	0	5	-	108	95	-12.0
Current Income Tax	635	236	-62.8	269	346	28.2	-199	-	-	60	41	-32.2	766	622	-18.7
Income after Current Income Tax	1373	762	-44.5	570	631	10.7	190	60	-68.1	61	99	63.5	2194	1553	-29.2
Deferred Income Tax	203	231	13.6	102	66	-35.7	50	-5	-	-2	6	-	354	298	-15.8
Net Income after Taxes	1170	531	-54.6	468	565	20.9	140	65	-53.1	63	93	48.5	1840	1255	-31.8
Extraordinary Gains	-58	-8	-	1	25	-	0	5	-	12	0	-99.2	-46	22	-
Net Income after Extraordinary Items	1112	523	-52.9	468	590	26.0	140	70	-49.8	74	93	25.5	1794	1276	-28.9
Internal Cash Flow	3249	3027	-6.8	951	1006	5.8	140	153	9.6	227	244	7.6	4567	4431	-3.0

B2

Income and Expense Statement – All Operations in millions of dollars
Integrateds and Refiners
First six months

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Total Revenues	2888	2590	– 10.3	12732	13241	4.0	835	748	– 10.3	92	123	34.4	16547	16702	0.9
Royalties and other Payments	456	427	– 6.4	0	0	–	0	0	–	0	0	–	456	427	– 6.4
PGRT and other Taxes	0	0	–	1930	2272	17.7	8	2	– 77.4	0	0	–	1938	2273	17.3
Total Revenue after Royalties	2432	2163	– 11.1	10802	10969	1.5	827	747	– 9.7	92	123	34.4	14153	14002	– 1.1
Cost of Goods Sold	0	0	–	8064	7929	– 1.7	615	434	– 29.4	46	84	83.0	8725	8446	– 3.2
Interest Expenses	40	0	– 99.9	39	37	– 4.9	150	164	9.2	2	–	–	232	202	– 12.9
Operating Costs	872	944	8.3	1510	1693	12.1	80	75	– 6.5	15	11	– 29.6	2476	2722	9.9
R&D Costs (excluding Oil Sands)	11	11	0.6	19	21	7.7	1	–	–	0	0	–	31	32	1.9
Other Expenses	43	61	43.8	12	17	42.3	25	32	28.0	1	0	– 68.0	81	111	37.5
Oil Sands R&D Expensed	0	0	– 60.5	0	0	–	0	0	–	0	0	–	0	0	– 60.5
E&D Expensed	101	137	35.7	0	0	–	9	11	24.2	0	0	–	110	148	34.8
Depreciation	160	176	9.9	332	341	2.5	39	33	– 16.7	1	1	36.2	532	550	3.4
Depletion	160	163	1.9	0	0	–	0	0	29.4	12	9	– 22.3	172	172	0.3
Write-Offs and Amortization	125	140	12.4	23	9	– 59.4	– 15	– 7	–	– 1	1	–	131	143	9.1
Non-cash Charges and E&D	546	617	12.9	355	350	– 1.4	33	37	11.0	11	11	– 2.4	946	1014	7.2
Income before Taxes	921	530	– 42.4	802	922	15.0	– 77	5	–	17	18	3.3	1663	1475	– 11.3
Federal Income Tax	265	98	– 62.8	206	238	15.4	– 169	– 24	–	9	4	– 55.3	310	316	2.0
Provincial Income Tax	65	15	– 77.3	63	97	54.9	– 36	– 9	–	0	0	–	92	103	12.2
Current Income Tax	330	113	– 65.7	269	335	24.6	– 205	– 33	–	9	4	– 55.3	402	419	4.3
Income after Current Income Tax	591	417	– 29.5	534	588	10.1	128	38	– 70.5	9	14	60.6	1261	1056	– 16.3
Deferred Income Tax	91	128	40.5	98	66	– 33.1	110	– 9	–	–	5	–	299	189	– 36.7
Net Income after Taxes	500	289	– 42.2	435	522	19.9	18	47	161.8	9	9	1.8	962	867	– 9.9
Extraordinary Gains	0	– 30	–	1	25	–	0	0	–	0	0	–	1	– 5	–
Net Income after Extraordinary Items	500	259	– 48.2	436	546	25.4	18	47	161.8	9	9	1.8	963	861	– 10.5
Internal Cash Flow	1137	1033	– 9.1	889	938	5.5	161	75	– 53.8	20	25	25.3	2207	2070	– 6.2

B3

Income and Expense Statement – All Operations in millions of dollars

Junior Oil and Gas Producers

First six months

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Total Revenues	1512	1597	5.7	42	21	-49.3	162	273	67.9	386	274	-29.1	2102	2165	3.0
Royalties and other Payments	271	278	2.7	0	0	–	0	0	–	0	0	–	271	278	2.7
PGRT and other Taxes	0	0	–	0	0	–	0	0	–	27	27	-0.2	27	27	-0.1
Total Revenue after Royalties	1241	1319	6.3	42	21	-49.3	162	273	67.9	359	247	-31.3	1804	1860	3.1
Cost of Goods Sold	0	0	–	9	16	85.9	1	0	-100	82	0	-100	91	16	-82.0
Interest Expenses	244	246	0.7	0	0	-77.2	25	29	15.6	11	4	-62.0	280	279	-0.4
Operating Costs	342	401	17.3	28	2	-91.4	67	164	145.5	78	88	13.0	515	656	27.4
R&D Costs (excluding Oil Sands)	0	1	–	0	0	–	0	0	0.9	0	1	178.8	0	1	280.6
Other Expenses	88	129	46.7	0	0	10.3	14	32	124.7	19	14	-26.4	121	175	44.4
Oil Sands R&D Expensed	0	0	176.8	0	0	–	0	0	–	0	0	–	0	0	176.8
E&D Expensed	32	39	20.6	0	0	–	0	0	–	0	7	–	32	45	40.0
Depreciation	101	99	-1.9	3	1	-72.1	10	16	65.3	8	20	160.9	121	136	11.6
Depletion	304	354	16.1	0	0	–	5	5	0.9	104	70	-33.0	413	428	3.6
Write-Offs and Amortization	-19	5	–	0	0	–	-9	3	–	-16	1	–	-45	9	–
Non-cash Charges and E&D	418	496	18.8	3	1	-72.1	5	25	349.6	95	97	1.6	522	619	18.5
Income before Taxes	149	46	-69.3	1	1	-13.3	50	23	-53.8	74	43	41.6	274	113	-58.7
Federal Income Tax	28	0	-99.2	0	0	-63.7	5	3	-41.0	34	16	-51.7	67	19	-70.7
Provincial Income Tax	-55	-64	–	0	0	-42.4	1	0	-61.3	0	2	–	-54	-62	–
Current Income Tax	-27	-64	–	1	0	-58.2	5	3	-43.6	34	19	-44.9	13	-42	–
Income after Current Income Tax	176	110	-37.6	1	1	30.8	45	20	-55.0	40	25	-38.8	262	156	-40.6
Deferred Income Tax	47	37	-21.6	–	0	–	9	8	-9.0	4	-1	–	60	45	-25.5
Net Income after Taxes	129	73	-43.4	1	1	-15.9	35	12	-66.9	37	26	-30.2	202	111	-45.0
Extraordinary Gains	-122	5	–	0	0	–	0	0	-100	12	0	-99.2	-110	5	–
Net Income after Extraordinary Items	7	78	–	1	1	-15.9	35	12	-66.9	48	26	-46.7	92	116	26.2
Internal Cash Flow	594	606	2.1	4	2	-55.3	50	45	-10.8	136	122	-10.4	784	774	-1.2

B4

Income and Expense Statement – All Operations in millions of dollars
Senior Oil and Gas Producers
First six months

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Total Revenues	4207	4148	-1.4	219	257	17.5	328	359	9.2	241	257	6.3	4995	5020	0.5
Royalties and other Payments	694	664	-4.4	0	0	–	0	0	–	0	0	–	694	664	-4.4
PGRT and other Taxes	0	0	–	1	0	-100	3	3	18.7	15	13	-18.5	19	16	-15.7
Total Revenue after Royalties	3513	3484	-0.8	218	257	17.8	326	355	9.2	226	244	8.0	4282	4341	1.4
Cost of Goods Sold	0	0	–	82	89	8.3	0	0	–	50	51	0.9	133	140	5.5
Interest Expenses	505	506	0.3	6	3	-52.4	219	72	-67.2	10	9	-14.1	740	590	-20.3
Operating Costs	1033	1192	15.3	72	88	23.0	153	188	23.5	61	56	-8.0	1319	1525	15.6
R&D Costs (excluding Oil Sands)	13	19	41.1	0	0	–	0	0	-1000	0	0	–	13	19	41.0
Other Expenses	110	193	74.6	0	0	-100	25	32	29.4	15	12	-20.1	150	236	57.9
Oil Sands R&D Expensed	5	11	110.3	0	0	–	0	0	–	0	0	–	5	11	110.3
E&D Expensed	198	266	34.5	0	0	–	4	11	187.9	2	9	–	203	286	40.6
Depreciation	205	258	26.0	23	25	9.8	47	52	11.4	5	14	167.6	279	349	24.9
Depletion	434	502	15.6	0	0	–	2	2	0.2	55	54	-1.7	491	558	13.6
Write-Offs and Amortization	70	116	65.0	-1	-2	–	-141	-34	–	-2	-40	–	-74	41	–
Non-cash Charges and E&D	912	1152	26.4	22	24	7.3	-88	31	–	60	37	-37.8	906	1245	37.5
Income before Taxes	939	423	-55.0	36	53	47.7	18	32	79.7	29	79	168.2	1022	587	-42.6
Federal Income Tax	263	148	-43.8	-0	7	–	0	21	–	18	16	-10.0	281	192	-31.8
Provincial Income Tax	69	39	-43.3	0	3	–	1	9	–	0	2	–	70	54	-23.5
Current Income Tax	332	187	-43.7	0	11	–	1	29	–	18	18	3.2	351	245	-30.1
Income after Current Income Tax	607	236	-61.2	36	42	18.6	17	3	-85.0	12	61	–	671	341	-49.1
Deferred Income Tax	66	67	1.6	4	–	–	-69	-5	–	-5	3	–	-5	64	–
Net Income after Taxes	541	169	-68.8	32	43	35.2	86	7	-91.8	17	58	247.5	676	277	-59.0
Extraordinary Gains	64	17	-72.7	0	0	–	0	5	–	0	0	–	64	22	-65.5
Net Income after Extraordinary Items	605	187	-69.2	32	43	35.2	86	12	-86.5	17	58	247.5	739	299	-59.6
Internal Cash Flow	1519	1388	-8.6	58	66	14.3	-72	34	–	71	98	37.0	1576	1586	0.6

B5

Income and Expense Statement – All Operations in millions of dollars

Total Oil and Gas Producers

First six months

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Total Revenues	5718	5745	0.5	261	278	6.7	491	631	28.7	628	530	-15.5	7097	7185	1.2
Royalties and other Payments	965	942	-2.4	0	0	–	0	0	–	0	0	–	965	942	-2.4
PGRT and other Taxes	0	0	–	1	0	-97.0	3	3	18.7	42	39	-6.9	45	42	-6.5
Total Revenue after Royalties	4753	4803	1.1	260	278	7.0	488	628	28.7	585	491	-16.1	6087	6201	1.9
Cost of Goods Sold	0	0	–	91	105	15.8	1	0	-100	132	51	-61.5	224	156	-30.2
Interest Expenses	748	752	0.4	6	3	-52.7	244	101	-58.6	21	13	-38.7	1020	869	-14.9
Operating Costs	1376	1593	15.8	100	91	-9.1	219	352	60.6	140	145	3.8	1834	2181	18.9
R&D Costs (excluding Oil Sands)	13	19	45.0	0	0	–	0	0	-8.3	0	1	178.8	14	20	46.4
Other Expenses	198	322	62.2	0	0	-0.4	39	64	64.2	33	26	-23.6	271	411	51.9
Oil Sands R&D Expensed	5	11	112.2	0	0	–	0	0	–	0	0	–	5	11	112.2
E&D Expensed	230	305	32.6	0	0	–	4	11	187.9	2	16	–	236	331	40.5
Depreciation	305	356	16.8	27	26	-1.0	56	68	20.8	13	34	163.6	401	485	20.9
Depletion	739	856	15.8	0	0	–	8	8	0.7	159	123	-22.2	905	986	9.0
Write-Offs and Amortization	51	121	138.0	-1	-2	–	-151	-31	–	-18	-39	–	-119	50	–
Non-cash Charges and E&D	1330	1649	24.0	26	25	-3.5	-83	56	–	155	134	-13.6	1428	1864	30.5
Income before Taxes	1088	468	-56.9	37	54	45.5	68	55	-18.8	104	122	18.0	1296	700	-46.0
Federal Income Tax	291	148	-49.1	0	7	–	5	23	364.5	52	32	-37.3	347	211	-39.3
Provincial Income Tax	14	-25	–	0	3	–	1	9	–	0	5	–	16	-8	–
Current Income Tax	305	123	-59.7	1	11	–	6	32	–	52	37	-28.3	364	203	-44.1
Income after Current Income Tax	783	345	-55.9	36	43	18.9	61	23	-63.2	52	85	64.0	933	497	-46.7
Deferred Income Tax	113	104	-8.1	4	0	-99.6	-60	4	–	-1	2	–	55	109	98.1
Net Income after Taxes	670	242	-63.9	32	43	33.9	122	19	-84.5	54	84	56.5	878	388	-55.8
Extraordinary Gains	-58	22	–	0	0	–	0	5	–	12	0	-99.2	-46	27	–
Net Income after Extraordinary Items	612	264	-56.8	32	43	33.9	122	23	-80.8	65	84	28.9	831	415	-50.1
Internal Cash Flow	2112	1994	-5.6	62	68	9.6	-22	79	–	207	219	5.9	2360	2360	–

B6

Income and Expense Statement – All Operations in millions of dollars
Canadian-Controlled Companies
First six months

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Total Revenues	3044	3107	2.1	4153	4424	6.5	765	975	27.5	328	255	-22.1	8290	8761	5.7
Royalties and other Payments	472	481	1.9	0	0	–	0	0	–	0	0	–	472	481	1.9
PGRT and other Taxes	0	0	–	584	616	5.5	3	5	43.5	4	1	-71.8	592	623	5.2
Total Revenue after Royalties	2573	2626	2.1	3569	3808	6.7	761	970	27.4	324	254	-21.5	7226	7658	6.0
Cost of Goods Sold	0	0	–	2565	2741	6.8	438	440	0.3	83	0	-100	3087	3180	3.0
Interest Expenses	248	246	-0.7	24	10	-56.2	191	106	-44.2	19	13	-32.7	482	376	-22.0
Operating Costs	817	945	15.6	572	605	5.7	149	266	78.6	73	91	24.9	1612	1907	18.3
R&D Costs (excluding Oil Sands)	3	2	-27.3	0	0	–	0	0	0.9	0	1	178.8	4	3	-15.8
Other Expenses	106	136	27.8	4	8	135.4	33	58	78.0	20	15	-24.5	162	217	33.8
Oil Sands R&D Expensed	1	1	-22.8	0	0	–	0	0	–	0	0	–	1	1	-22.8
E&D Expensed	48	66	36.5	0	0	–	1	7	–	0	7	–	49	80	61.9
Depreciation	204	221	8.6	148	150	1.1	33	34	2.3	12	33	185.3	396	438	10.5
Depletion	429	535	24.8	0	0	–	6	7	20.5	95	64	-32.7	530	606	14.4
Write-Offs and Amortization	61	81	31.8	7	5	-25.2	-142	-6	–	-3	3	–	-77	82	–
Non-cash Charges and E&D	743	904	21.6	155	155	-0.1	-102	41	–	105	108	3.2	901	1208	34.1
Income before Taxes	655	394	-39.9	249	289	16.1	53	59	11.3	23	26	14.4	979	767	-21.6
Federal Income Tax	90	40	-55.9	55	65	17.8	-16	10	–	31	11	-65.6	161	126	-21.5
Provincial Income Tax	-17	-42	–	27	29	4.3	-8	5	–	0	5	–	2	-4	–
Current Income Tax	73	-2	–	83	94	13.4	-23	15	–	31	15	-50.5	163	122	-25.3
Income after Current Income Tax	582	396	-32.0	166	195	17.5	76	44	-42.7	-8	11	–	816	645	-20.9
Deferred Income Tax	135	109	-18.9	30	22	-26.8	-60	-1	–	-9	3	–	95	133	39.1
Net Income after Taxes	447	287	-35.9	136	173	27.2	137	45	-67.2	1	8	–	721	513	-28.9
Extraordinary Gains	-127	4	–	1	2	249.6	0	0	–	7	0	-98.7	-120	6	–
Net Income after Extraordinary Items	320	290	-9.3	137	175	28.2	137	45	-67.2	8	8	5.9	601	518	-13.7
Internal Cash Flow	1325	1300	-1.9	321	350	9.0	-26	85	–	97	119	22.9	1717	1853	7.9

B7

Income and Expense Statement – All Operations in millions of dollars
Foreign-Controlled Companies
First six months

	Upstream			Downstream			Other Operations			Foreign Activities			Total Operations		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Total Revenues	5562	5228	-6.0	8840	9095	2.9	561	405	-27.8	392	399	1.8	15355	15126	-1.5
Royalties and other Payments	949	888	-6.4	0	0	–	0	0	–	0	0	–	949	888	-6.4
PGRT and other Taxes	0	0	–	1346	1655	22.9	7	0	-100	38	38	0.5	1391	1693	21.7
Total Revenue after Royalties	4613	4340	-5.9	7494	7440	-0.7	554	405	-26.9	354	360	1.9	13014	12545	-3.6
Cost of Goods Sold	0	0	–	5590	5294	-5.3	177	-6	–	95	135	42.4	5862	5422	-7.5
Interest Expenses	541	506	-6.5	22	30	38.2	204	159	-22.2	4	0	-97.1	770	694	-9.8
Operating Costs	1430	1593	11.4	1037	1179	13.6	150	161	7.1	81	64	-21.5	2699	2996	11.0
R&D Costs (excluding Oil Sands)	21	28	33.4	19	21	7.7	1	–	–	0	0	–	41	49	18.2
Other Expenses	135	247	83.6	9	9	2.1	31	38	20.9	14	11	-24.9	189	305	61.3
Oil Sands R&D Expensed	5	11	134.1	0	0	–	0	0	–	0	0	–	5	11	134.1
E&D Expensed	283	376	33.0	0	0	–	12	15	31.1	2	8	333.5	296	400	34.8
Depreciation	262	311	19.0	211	217	3.1	63	67	7.1	2	1	-32.3	537	597	11.2
Depletion	470	483	2.9	0	0	–	2	1	-62.5	75	68	-8.7	546	552	1.1
Write-Offs and Amortization	114	180	57.7	15	3	-83.0	-24	-31	–	-17	-41	–	89	111	25.0
Non-cash Charges and E&D	1133	1362	20.2	226	220	-2.6	52	52	-1.2	61	37	-40.2	1473	1670	13.4
Income before Taxes	1353	605	-55.3	591	688	16.4	-62	1	–	98	114	16.3	1980	1408	-28.9
Federal Income Tax	465	207	-55.5	151	180	19.1	-149	-11	–	29	26	-13.0	497	401	-19.3
Provincial Income Tax	97	32	-67.1	36	72	101.1	-27	-4	–	0	0	–	106	99	-5.9
Current Income Tax	562	239	-57.5	187	252	34.8	-176	-15	–	29	26	-13.0	603	500	-16.9
Income after Current Income Tax	791	366	-53.7	404	436	7.9	113	17	-85.2	69	89	28.7	1378	908	-34.1
Deferred Income Tax	69	122	77.5	73	44	-39.4	110	-4	–	7	3	-50.1	259	165	-36.1
Net Income after Taxes	723	244	-66.2	331	392	18.3	3	21	–	62	85	37.6	1119	742	-33.7
Extraordinary Gains	69	-11	–	0	23	–	0	5	–	5	0	-100	74	16	-78.6
Net Income after Extraordinary Items	792	233	-70.6	331	415	25.1	3	25	–	67	85	27.8	1193	758	-36.5
Internal Cash Flow	1924	1728	-10.2	630	656	4.1	166	69	-58.7	130	125	-3.7	2850	2578	-9.6

B8

Financial Performance for Main Business Segments
Upstream Operations
First six months

	Total Industry			Canadian-Controlled			Foreign-Controlled		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Production of Oil Equivalent(1) in thousands of cubic metres	78385	89104	13.7	29230	34390	17.7	49154	54714	11.3
Key Financial Items in millions of dollars			%			%			%
Gross Revenue	8607	8335	-3.2	3044	3107	2.1	5562	5228	-6.0
Cash Income	3249	3027	-6.8	1325	1300	-1.9	1924	1728	-10.2
Net Income	1170	531	-54.6	447	287	-35.9	723	244	-66.2
Net Income plus Interest	1959	1283	-34.5	695	533	-23.4	1264	750	-40.6
Capital Employed	49177	51057	3.8	22056	23907	8.4	27121	27150	0.1
Unit Revenues and Costs in dollars per cubic metre			%			%			%
Gross Revenue	109.80	93.54	-14.8	104.15	90.34	-13.3	113.16	95.55	-15.6
Roy alties and other Payments	18.13	15.36	-15.3	16.14	13.97	-13.4	19.31	16.23	-16.0
PGRT and other Taxes	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-
Revenues after Royalties and Taxes	91.67	78.18	-14.7	88.01	76.37	-13.2	93.84	79.32	-15.5
Interest Expenses	10.06	8.44	-16.2	8.48	7.15	-15.6	11.00	9.24	-16.0
Operating Costs (excluding Research)	28.67	28.48	-0.7	27.95	27.47	-1.7	29.10	29.11	0.1
Research and other Expenses	3.38	4.64	37.1	3.76	4.02	7.1	3.16	5.02	58.9
Cash Income before Taxes	49.55	36.63	-26.1	47.83	37.72	-21.1	50.58	35.94	-29.0
E&D & Oil Sands R&D Expensed	4.30	5.09	18.5	1.69	1.94	14.9	5.85	7.07	20.9
Depreciation	5.93	5.97	0.7	6.97	6.43	-7.7	5.32	5.69	6.9
Depletion	11.47	11.43	-0.3	14.67	15.56	6.0	9.56	8.83	-7.6
Write-offs	2.24	2.93	30.8	2.09	2.34	12.0	2.33	3.29	41.7
Net Income Before Taxes	25.62	11.20	-56.3	22.40	11.44	-48.9	27.53	11.05	-59.9
Federal Income Tax	7.08	2.77	-60.9	3.08	1.15	-62.5	9.46	3.78	-60.1
Provincial Income Tax	1.02	-0.11	-	-0.58	-1.22	-	1.97	0.58	-70.5
Deferred Income Tax	2.59	2.59	-0.1	4.61	3.18	-31.1	1.40	2.23	59.4
Net Income after Taxes	14.92	5.96	-60.1	15.30	8.34	-45.5	14.70	4.47	-69.6
Extraordinary Gains	-0.74	-0.09	-	-4.35	0.10	-	1.41	-0.21	-
Net Income after Extraordinary Items	14.19	5.87	-58.6	10.95	8.44	-22.9	16.11	4.26	-73.6
Internal Cash Flow	41.45	33.97	-18.0	45.33	37.79	-16.6	39.15	31.58	-19.3
Ratios in percent									
Natural Gas as a percent of Total Production	42.4	45.0	N/A	47.8	51.1	N/A	39.2	41.2	N/A
Oil Subject to Old Oil Royalty as a percent of Conventional Oil Production	49.5	47.0	N/A	49.0	47.3	N/A	49.8	46.8	N/A

(1) Does not include sulphur.

B8(continued)

Financial Performance for Main Business Segments

Upstream Operations

First six months

	Integrateds/Refiners			Junior O&G Producers			Senior O&G Producers		
	1987	1988	Change	1987	1988	Change	1987	1988	Change
Production of Oil Equivalent(1) in thousands of cubic metres	25995	27957	7.5	16084	19220	19.5	36305	41927	15.5
Key Financial Items in millions of dollars			%			%			%
Gross Revenue	2888	2590	-10.3	1512	1597	5.7	4207	4148	-1.4
Cash Income	1137	1033	-9.1	594	606	2.1	1519	1388	-8.6
Net Income	500	289	-42.2	129	73	-43.4	541	169	-68.8
Net Income plus Interest	540	289	46.5	373	319	-14.5	1046	675	-35.5
Capital Employed	13157	13615	3.5	13783	14535	5.5	22237	22906	3.0
Unit Revenues and Costs in dollars per cubic metre			%			%			%
Gross Revenue	111.10	92.63	-16.6	93.98	83.10	-11.6	115.87	98.93	-14.6
Royalties and other Payments	17.54	15.26	-13.0	16.85	14.49	-14.0	19.12	15.83	-17.2
PGRT and other Taxes	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-
Revenues after Royalties and Taxes	93.57	77.37	-17.3	77.13	68.62	-11.0	96.75	83.10	-14.1
Interest Expenses	1.55	0.00	-99.9	15.16	12.78	-15.7	13.90	12.07	-13.2
Operating Costs (excluding Research)	33.53	33.78	0.7	21.27	20.88	-1.8	28.47	28.43	-0.1
Research and other Expenses	2.06	2.59	25.5	5.47	6.74	23.2	3.40	5.04	48.1
Cash Income before Taxes	56.43	41.01	-27.3	35.22	28.20	-19.9	50.98	37.57	-26.3
E&D & Oil Sands R&D Expensed	3.91	4.92	25.9	2.00	2.03	1.6	5.59	6.61	18.1
Depreciation	6.16	6.29	2.2	6.26	5.14	-17.9	5.63	6.15	9.1
Depletion	6.15	5.83	-5.2	18.93	18.40	-2.8	11.96	11.97	0.1
Write-offs	4.80	5.01	4.5	-1.20	0.26	-	1.93	2.76	42.8
Net Income Before Taxes	35.41	18.95	-46.5	9.24	2.38	-74.3	25.86	10.08	-61.0
Federal Income Tax	10.18	3.52	-65.4	1.72	0.01	-99.3	7.24	3.52	-51.3
Provincial Income Tax	2.51	0.53	-78.9	-3.42	-3.35	-	1.91	0.94	-50.9
Deferred Income Tax	3.49	4.56	30.7	2.93	1.92	-34.4	1.80	1.59	-12.0
Net Income after Taxes	19.23	10.34	-46.2	8.01	3.79	-52.6	14.90	4.03	-72.9
Extraordinary Gains	0.00	-1.07	-	-7.56	0.25	-	1.76	0.42	-76.3
Net Income after Extraordinary Items	19.23	9.26	-51.8	0.45	4.05	-	16.66	4.45	-73.3
Internal Cash Flow	43.73	36.95	-15.5	36.92	31.54	-14.6	41.83	33.10	-20.9
Ratios in percent									
Natural Gas as a Percent of Total Production	30.2	31.9	N/A	58.1	60.5	N/A	44.1	46.6	N/A
Oil Subject to Old Oil Royalty as a percent of Conventional Oil Production	47.1	44.3	N/A	38.1	39.4	N/A	56.0	51.8	N/A

(1) Does not include sulphur.

B9

Financial Performance for Main Business Segments

Downstream Operations

First six months

	Total Downstream			Petrochemicals and Other			Total Oil Products Operations(1)					
	1987	1988	Change	1987	1988	Change	1987	1988	Change	1987	1988	Change
	$ millions		%	$ millions		%	$ millions		%	$/m³		%
Total Revenue	12993	13519	4.0	1570	2000	27.4	11424	11519	0.8	288.06	287.75	- 0.1
Sales, Excise and other Taxes	1931	2272	17.7	1	0	- 54.3	1930	2271	17.7	48.66	56.74	16.6
Cost of Goods Sold	8155	8034	- 1.5	1016	1247	22.7	7139	6787	- 4.9	180.02	169.55	- 5.8
Operating Costs	1610	1783	10.8	205	213	4.0	1405	1570	11.8	35.42	39.23	10.7
R&D Costs (excluding Oil Sands)	19	21	7.7	8	7	- 19.0	11	14	27.9	0.28	0.35	26.7
Other Expenses	12	17	41.3	- 1	1	-	13	16	28.2	0.32	0.41	27.0
Cash Income before Interest and Taxes	1266	1392	9.9	340	532	56.5	926	860	- 7.2	23.35	21.48	- 8.0
Interest Expenses	46	40	- 11.3	10	4	- 62.5	36	37	2.6	0.90	0.92	1.7
Cash Income before Taxes	1220	1351	10.7	330	528	60.1	890	823	- 7.6	22.45	20.56	- 8.4
Current Income Tax	269	346	28.2	77	154	101.8	193	191	- 1.0	4.86	4.77	- 1.9
Internal Cash Flow	951	1006	5.8	254	374	47.5	697	632	- 9.4	17.58	15.79	- 10.2
Depreciation and other Non-cash Charges	381	375	- 1.6	101	95	- 6.3	280	280	0.1	7.06	7.00	- 0.8
Income after Current Income Tax	570	631	10.7	152	279	83.1	418	352	- 15.7	10.53	8.79	- 16.5
Deferred Income Tax	102	66	- 35.7	- 0	15	-	103	51	- 50.1	2.59	1.28	- 50.6
Net Income after Taxes	468	565	20.9	153	264	73.3	315	301	- 4.5	7.94	7.51	- 5.4
Extraordinary Items	1	25	-	0	0	-	1	25	-	0.02	0.62	-
Net Income after Extraordinary Items	468	590	26.0	153	264	73.3	316	325	3.1	7.96	8.13	2.1

	National Refiners-Marketers			Regional Refiners-Marketers		
	1987	1988	Change	1987	1988	Change
	$/m³		%	$/m³		%
Total Revenue	289.49	276.79	- 4.4	284.21	316.63	11.4
Sales, Excise and other Taxes	49.69	50.08	0.8	45.89	74.25	61.8
Cost of Goods Sold	179.97	164.36	- 8.7	180.18	183.22	1.7
Operating Costs	37.64	42.49	12.9	29.45	30.65	4.1
R&D Costs (excluding Oil Sands)	0.34	0.43	26.0	0.09	0.13	39.3
Other Expenses	- 0.07	- 0.10	-	1.37	1.73	26.7
Cash Income before Interest and Taxes	21.91	19.51	- 11.0	27.23	26.65	- 2.1
Interest Expenses	0.00	0.01	67.5	3.32	3.32	- 0.2
Cash Income before Taxes	21.91	19.50	- 11.0	23.91	23.34	- 2.4
Current Income Tax	5.06	4.89	- 3.3	4.34	4.46	2.6
Internal Cash Flow	16.85	14.61	- 13.3	19.56	18.88	- 3.5
Depreciation and other Non - cash Charges	6.49	6.51	0.2	8.58	8.29	- 3.3
Income after Current Income Tax	10.36	8.11	- 21.7	10.99	10.59	- 3.6
Deferred Income Tax	2.24	0.77	- 65.7	3.52	2.62	- 25.6
Net Income after Taxes	8.12	7.34	- 9.6	7.46	7.96	6.7
Extraordinary Items	0.00	0.00	-	0.06	2.23	-
Net Income after Extraordinary Items	8.12	7.34	- 9.6	7.52	10.20	35.7
Ratios in percent			Change			Change
'Clean Products' Sales as a percent of Total Sales Volume	81.94	81.77	- 0.2	84.57	82.04	- 3.0
Net Sales in Canada as a percent of Total Sales Volume	90.81	90.98	0.2	88.14	89.99	2.1
Export Sales as a percent of Total Sales Volume	6.03	5.43	- 10.0	11.13	8.70	- 21.8

(1) The calculation of unit costs and revenues is based on total sales volume data for the aggregates mentioned.

B10

Sources and Uses of Funds in millions of dollars
First six months

	Total Industry			Canadian-Controlled			Foreign-Controlled		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Cash Generated by Operations	4567	4431	- 3 0	1717	1853	7 9	2850	2578	- 9 6
Net Increase in Long-term Debt	1569	912	- 41 9	1066	290	- 72 7	504	622	23 4
Issue of Shares	738	1109	50 3	322	455	41 2	416	654	57 4
Grants (PIP and others)	187	233	24 6	91	133	46 0	96	100	4 2
All Other Sources	1258	2333	85 5	639	972	52 2	619	1361	119 9
Working Capital Decrease	942	2485	163 8	402	2084	-	540	402	- 25 7
Total Sources of Funds	9261	11503	24 2	4236	5787	36 6	5025	5716	13 7
Total Capital Expenditures in Canada	2715	4117	51 6	1192	1908	60 1	1523	2209	45 0
Capital Expenditures in U.S.A.	85	62	- 26 9	41	50	20 3	43	12	- 71 9
Other Foreign Capital Expenditures	173	183	6 0	100	111	11 5	73	72	- 1 4
Total Foreign Capital Expenditures	258	245	- 4 8	141	161	14 1	116	84	- 27 8
Total Company Capital Expenditures	2972	4362	46 7	1333	2069	55 2	1639	2293	39 9
Dividends:									
Common Shares	608	566	- 7 0	156	148	- 4 8	453	418	- 7 7
Preferred Shares	126	115	- 8 3	94	92	- 2 2	32	23	- 26 5
Total	734	681	- 7 2	250	240	- 3 8	484	441	- 9 0
Reduction of Equity	266	1086	307 8	37	917	-	229	169	- 26 2
Total Dividend and Equity Reduction	1000	1767	76 7	287	1158	303 1	713	610	- 14 5
Net Decrease in Long-term Debt	1184	1794	51 4	519	1040	100 2	665	754	13 3
All Other Applications	1814	2325	28 2	1025	1225	19 5	789	1101	39 5
Working Capital Increase	2290	1255	- 45 2	1072	296	- 72 3	1218	958	- 21 3
Total Applications of Funds	9261	11503	24 2	4236	5787	36 6	5025	5716	13 7

	Integrateds/Refiners			Junior O&G Producers			Senior O&G Producers		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Cash Generated by Operations	2207	2070	- 6 2	784	774	- 1 2	1576	1586	0 6
Net Increase in Long-term Debt	410	178	- 56 6	347	314	- 9 5	812	420	- 48 3
Issue of Shares	9	18	93 9	496	952	92 0	232	138	- 40 4
Grants (PIP and others)	59	56	- 3 9	60	103	70 2	68	74	8 8
All Other Sources	190	221	16 1	601	1135	88 8	467	978	109 4
Working Capital Decrease	70	1074	-	431	392	- 9 2	441	1020	131 5
Total Sources of Funds	2946	3618	22 8	2719	3670	34 9	3596	4216	17 2
Total Capital Expenditures in Canada	928	1370	47 6	703	1183	68 4	1084	1564	44 3
Capital Expenditure in U S A.	0	0	- 100 0	9	4	- 54 9	76	58	- 23 6
Other Foreign Capital Expenditures	8	14	77 9	143	107	- 25 1	22	62	183 3
Total Foreign Capital Expenditures	8	14	77 6	152	111	- 26 9	98	120	22 9
Total Company Capital Expenditures	936	1384	47 8	855	1295	51 5	1181	1684	42 5
Dividends:									
Common Shares	331	314	- 5 0	18	17	- 3 3	259	234	- 9 8
Preferred Shares	43	23	- 45 4	50	45	- 9 8	32	46	43 7
Total	374	338	- 9 7	68	63	- 8 1	292	280	- 3 8
Reduction of Equity	0	1032	-	22	40	81 9	244	14	- 94 2
Total Dividend and Equity Reduction	374	1370	266 2	90	103	13 9	536	295	- 45 0
Net Decrease in Long-term Debt	310	114	- 63 3	504	885	75 4	370	795	114 6
All Other Applications	576	374	- 35 0	699	920	31 7	539	1031	91 2
Working Capital Increase	750	376	- 49 8	571	467	- 18 3	969	412	- 57 5
Total Applications of Funds	2946	3618	22 8	2719	3670	34 9	3596	4216	17 2

B11

Upstream Canadian Capital Expenditures by Location in millions of dollars
First six months

	Total Canadian			Provinces			Canada Lands		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Total Industry									
Land and Lease, Geological and Geophysical	585	782	33.7	570	747	31.0	15	36	133.9
Exploration Drilling	556	841	51.3	423	596	41.0	133	245	83.8
Total Exploration	1142	1624	42.2	993	1343	35.3	149	281	88.9
Development Drilling	393	624	59.1	385	617	60.4	8	7	-9.2
Production	460	752	63.4	444	747	68.4	16	4	-73.4
Non-conventional Heavy Oil and Oil Sands	201	432	115.2	201	432	115.2	0	0	-
Total Upstream	2195	3432	56.4	2022	3140	55.3	173	292	69.3
Canadian- Controlled Companies									
Land and Lease, Geological and Geophysical	274	360	31.5	268	359	34.0	6	1	-78.9
Exploration Drilling	266	489	84.1	193	344	78.0	72	145	100.4
Total Exploration	539	849	57.5	461	703	52.5	78	146	86.8
Development Drilling	150	276	83.6	150	276	83.6	0	0	-100.0
Production	151	293	93.6	148	293	98.2	4	0	-95.3
Non-conventional Heavy Oil and Oil Sands	81	115	41.1	81	115	41.1	0	0	-
Total Upstream	922	1533	66.2	841	1387	65.0	82	146	78.8
Foreign- Controlled Companies									
Land and Lease, Geological and Geophysical	312	423	35.5	303	388	28.3	9	34	269.6
Exploration Drilling	290	352	21.2	229	252	9.8	61	100	64.1
Total Exploration	602	775	28.6	532	640	20.3	70	135	91.3
Development Drilling	242	349	43.9	235	342	45.6	8	7	-9.2
Production	309	459	48.6	296	454	53.6	13	4	-67.2
Non-conventional Heavy Oil and Oil Sands	119	317	165.8	119	317	165.8	0	0	-
Total Upstream	1272	1899	49.2	1182	1753	48.4	91	146	60.7

B12

Capital Expenditures by Activity in millions of dollars
First six months

	Total Industry			Canadian-Controlled			Foreign-Controlled		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Exploration	1142	1624	42.2	539	849	57.5	602	775	28.6
Development	393	624	59.1	150	276	83.6	242	349	43.9
Production	460	752	63.4	151	293	93.6	309	459	48.6
Oil Sands	201	432	115.2	81	115	41.1	119	317	165.8
Total Upstream	2195	3432	56.4	922	1533	66.2	1272	1899	49.2
Total Downstream	387	527	36.3	217	326	49.9	170	202	18.9
Uranium	0	0	–	0	0	–	0	0	–
Coal	3	7	175.0	0	2	–	2	5	125.5
All Others	131	151	15.3	52	47	-8.9	79	103	31.3
Total Capital Expenditures in Canada	2715	4117	51.6	1192	1908	60.1	1523	2209	45.0
Total Capital Expenditures Abroad	258	245	-4.8	141	161	14.1	116	84	-27.8
Total Company Capital Expenditures	2972	4362	46.7	1333	2069	55.2	1639	2293	39.9
	Integrateds & Refiners			Junior O&G Producers			Senior O&G Producers		
Exploration	271	371	37.0	324	553	70.9	547	699	27.8
Development	108	153	40.8	134	229	70.1	150	243	62.4
Production	139	204	46.7	130	194	49.0	190	353	85.5
Oil Sands	121	273	125.2	2	2	-15.4	78	158	102.9
Total Upstream	640	1001	56.5	591	978	65.6	965	1453	50.6
Total Downstream	253	319	26.2	82	179	118.7	52	30	-43.3
Uranium	0	0	–	0	0	–	0	0	–
Coal	2	5	157.9	0	0	–	1	2	218.2
All Others	34	45	33.0	30	27	-12.2	66	79	18.8
Total Capital Expenditures in Canada	928	1370	47.6	703	1183	68.4	1084	1564	44.3
Total Capital Expenditures Abroad	8	14	77.6	152	111	-26.9	98	120	22.9
Total Company Capital Expenditures	936	1384	47.8	855	1295	51.5	1181	1684	42.5

B13

Balance Sheet in millions of dollars

	Total Industry			Canadian-Controlled			Foreign-Controlled		
	Dec. 31 1987	June 30 1988	Change %	Dec. 31 1987	June 30 1988	Change %	Dec. 31 1987	June 30 1988	Change %
Cash, Investments and Marketable Securities	5091	4373	-14.1	2080	1479	-28.9	3011	2894	-3.9
Accounts Receivable:									
Affiliate	451	466	3.2	142	175	23.5	309	291	-6.1
All Other	6338	5944	-6.2	2531	2263	-10.6	3808	3681	-3.3
Total	6790	6409	-5.6	2673	2438	-8.8	4117	3972	-3.5
Inventories	4259	3852	-9.5	1461	1343	-8.1	2798	2510	-10.3
Other Current Assets	742	1022	37.7	295	355	20.4	447	667	49.1
Total Current Assets	16881	15657	-7.3	6508	5615	-13.7	10373	10042	-3.2
Property Plant and Equipment	93341	96789	3.7	41587	43730	5.2	51754	53060	2.5
Less:									
Accumulated Depletion Depreciation and Amortization	27789	30018	8.0	11575	12110	4.6	16214	17908	10.4
Net Fixed Assets	63501	65390	3.0	28987	30488	5.2	34514	34902	1.1
Other Long-term Assets	5579	5417	-2.9	2859	2763	-3.4	2720	2654	-2.4
Total Assets	85961	86464	0.6	38354	38866	1.3	47608	47599	0.0
Accounts Payable:									
Affiliate	478	879	84.1	116	373	222.7	362	506	39.8
All Other	6700	5413	-19.2	2605	2374	-8.8	4096	3038	-25.8
Total	7178	6292	-12.3	2720	2748	1.0	4458	3545	-20.5
Current Portion of Long-term Debt	1152	1357	17.8	463	693	49.6	689	663	-3.7
Other Current Liabilities	2828	3679	30.1	1158	1957	69.1	1671	1722	3.0
Total Current Liabilities	11158	11328	1.5	4341	5398	24.3	6817	5930	-13.0
Long-term Debt	20380	19156	-6.0	7874	7011	-11.0	12506	12146	-2.9
Prepayment for Deferred Production	1745	1547	-11.3	726	633	-12.8	1019	915	-10.3
Accumulated Deferred Income Taxes	11524	11958	3.8	5080	5372	5.8	6445	6586	2.2
Other Long-term Liabilities	2458	3185	29.6	491	656	33.6	1968	2529	28.6
Equity:									
Common Shares	15452	15758	2.0	10076	10484	4.1	5376	5274	-1.9
Preferred Shares	6156	5920	-3.8	4834	4339	-10.2	1322	1580	19.5
Retained Earning	12798	13602	6.3	2717	3051	12.3	10081	10551	4.7
Other Equity	4289	4010	-6.5	2216	1922	-13.3	2073	2088	0.7
Total Equity	38695	39289	1.5	19843	19796	-0.2	18853	19493	3.4
Total Liability, Deferred Taxes and Equity	85961	86464	0.6	38354	38866	1.3	47608	47599	0.0
Working Capital	5723	4329	-24.4	2167	217	-90.0	3556	4112	15.6

	Integrateds & Refiners			Junior O&G Producers			Senior O&G Producers		
Cash, Investments and Marketable Securities	2140	2050	-4.2	1116	1048	-6.1	1835	1275	-30.5
Accounts Receivable:									
Affiliate	59	131	122.1	139	147	5.9	253	187	-26.1
All Other	3626	3510	-3.2	892	817	-8.4	1821	1616	-11.2
Total	3685	3642	-1.2	1031	964	-6.5	2074	1803	-13.0
Inventories	3523	3084	-12.5	136	154	13.1	599	614	2.5
Other Current Assets	603	827	37.3	75	100	33.6	65	95	46.7
Total Current Assets	9951	9602	-3.5	2358	2266	-3.9	4572	3788	-17.2
Property Plant and Equipment	35796	36891	3.1	20351	21718	6.7	37194	38180	2.7
Less:									
Accumulated Depletion Depreciation and Amortization	11758	12490	6.2	5201	5434	4.5	10830	12094	11.7
Net Fixed Assets	23831	24170	1.4	14096	15134	7.4	25574	26087	2.0
Other Long-term Assets	2124	2179	2.6	1253	1213	-3.2	2203	2026	-8.0
Total Assets	35905	35951	0.1	17706	18612	5.1	32349	31901	-1.4
Accounts Payable:									
Affiliate	235	410	74.6	170	107	-37.1	73	362	398.8
All Other	3455	2826	-18.2	919	852	-7.2	2326	1735	-25.4
Total	3690	3236	-12.3	1089	960	-11.9	2399	2097	-12.6
Current Portion of Long-term Debt	361	367	1.9	543	764	40.6	248	225	-9.3
Other Current Liabilities	1317	2155	63.6	505	371	-26.6	1006	1153	14.7
Total Current Liabilities	5368	5758	7.3	2138	2094	-2.0	3653	3475	-4.9
Long-term Debt	2899	2867	-1.1	5545	4950	-10.7	11935	11340	-5.0
Prepayment for Deferred Production	391	345	-11.9	451	428	-4.9	903	774	-14.3
Accumulated Deferred Income Taxes	5763	5949	3.2	1573	1570	-0.2	4188	4440	6.0
Other Long-term Liabilities	808	920	13.9	670	1093	63.1	980	1171	19.6
Equity:									
Common Shares	6750	6782	0.5	4003	4470	11.7	4700	4506	-4.1
Preferred Shares	2778	1746	37.2	2052	2450	19.4	1325	1724	30.1
Retained Earning	10753	11127	3.5	2	216	-	2043	2259	10.6
Other Equity	394	458	16.0	1272	1341	5.4	2623	2211	-15.7
Total Equity	20676	20112	-2.7	7329	8477	15.7	10690	10700	0.1
Total Liability, Deferred Taxes and Equity	35905	35951	0.1	17706	18612	5.1	32349	31901	-1.4
Working Capital	4583	3844	-16.1	221	172	-22.0	919	313	-66.0

B14

Capital Employed by Sector and Segment in millions of dollars
First six months

	Total Industry			Canadian-Controlled			Foreign-Controlled		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Upstream	49177	51057	3.8	22056	23907	8.4	27121	27150	0.1
Refining and Marketing	10853	11656	7.4	4264	4816	12.9	6589	6840	3.8
Other Downstream	3208	3361	4.7	1108	1552	40.1	2101	1809	- 13.9
Other Canadian Operations	11309	5988	- 47.1	6262	1591	- 74.6	5048	4397	- 12.9
Total Canadian Operations	74547	72061	- 3.3	33689	31865	- 5.4	40858	40196	- 1.6
Foreign Operations	3115	3075	- 1.3	1647	1602	- 2.7	1468	1473	0.3
Grand Total	77662	75137	- 3.3	35337	33468	- 5.3	42326	41669	- 1.6

	Integrateds/Refiners			Junior O&G Producers			Senior O&G Producers		
	1986	1987	Change %	1986	1987	Change %	1986	1987	Change %
Upstream	13157	13615	3.5	13783	14535	5.5	22237	22906	3.0
Refining and Marketing	10849	11194	3.2	4	377	-	0	85	-
Other Downstream	2491	2466	- 1.0	56	2	- 96.2	662	892	34.9
Other Canadian Operations	3678	2521	- 31.5	1266	832	- 34.3	6365	2636	- 58.6
Total Canadian Operations	30174	29796	- 1.3	15109	15746	4.2	29264	26520	- 9.4
Foreign Operations	379	397	4.8	1323	772	- 41.6	1414	1906	34.8
Grand Total	30553	30193	- 1.2	16431	16518	0.5	30678	28425	- 7.3

Note:
Capital employed is defined as total assets less current liabilities.

B15

Volume and Value of Production

First six months

By Province

Volume in thousands of cubic metres	Alberta 1987	Alberta 1988	Alberta Change %	British Columbia 1987	British Columbia 1988	British Columbia Change %	Saskatchewan 1987	Saskatchewan 1988	Saskatchewan Change %
Conventional Crude - NORP	10931.6	13136.4	20.2	443.5	438.1	-1.2	3250.5	3234.2	-0.5
Conventional Crude - Other	12952.8	13403.0	3.5	582.8	501.2	-14.0	1501.0	1647.1	9.7
Conventional Crude Oil	23884.4	26539.4	11.1	1026.3	939.3	8.5	4751.5	4881.3	2.7
Oil Sands	8236.9	8660.4	5.1	0.0	0.0	-	0.9	5.2	-
Marketable Natural Gas (10^6m^3)	29607.1	36011.9	21.6	3656.2	3960.0	8.3	909.7	1340.6	47.4
Gas Plant Liquids	7653.4	8420.3	10.0	161.7	208.1	28.7	11.5	89.8	-
Total (including sulphur)	67365.2	77437.3	15.0	4687.5	4931.1	5.2	5636.7	6249.4	10.9
Value in millions of dollars			%			%			%
Conventional Crude - NORP	1478.4	1484.1	0.4	61.6	52.6	-14.7	386.1	306.3	-20.7
Conventional Crude - Other	1784.9	1459.8	-18.2	72.4	163.0	125.0	182.7	151.7	-17.0
Conventional Crude Oil	3263.3	2943.9	-9.8	134.1	215.6	60.8	568.8	458.0	-19.5
Oil Sands	1056.7	850.6	-19.5	0.1	0.0	-100.0	0.4	0.0	-93.0
Marketable Natural Gas	1827.6	2014.5	10.2	207.9	216.7	4.2	49.9	73.9	47.9
Gas Plant Liquids	701.1	700.8	-0.0	12.1	11.4	-5.8	1.0	7.5	-
Total (including sulphur)	6848.8	6509.7	-5.0	354.1	443.7	25.3	620.1	539.5	-13.0

By Company Group

Volume in thousands of cubic metres	Total Industry 1987	Total Industry 1988	Total Industry Change %	Canadian-Controlled 1987	Canadian-Controlled 1988	Canadian-Controlled Change %	Foreign-Controlled 1987	Foreign-Controlled 1988	Foreign-Controlled Change %
Conventional Crude - NORP	15504.1	17723.4	14.3	5362.5	6175.1	15.2	10141.6	11548.3	13.9
Conventional Crude - Other	15223.1	15707.3	3.2	5154.2	5547.9	7.6	10068.9	10159.4	0.9
Conventional Crude Oil	30727.2	33430.7	8.8	10516.7	11723.0	11.5	20210.5	21707.7	7.4
Oil Sands	8237.8	8665.6	5.2	2329.0	2415.0	3.7	5908.8	6250.6	5.8
Marketable Natural Gas (10^6m^3)	34351.7	41477.1	20.7	14438.9	18165.9	25.8	19912.8	23311.2	17.1
Gas Plant Liquids	7830.6	8722.4	11.4	3194.1	3530.2	10.5	4636.5	5192.2	12.0
Total (including sulphur)	78938.4	89859.4	13.8	29337.7	34511.1	17.6	49600.7	55348.3	11.6
Value in millions of dollars			%			%			%
Conventional Crude - NORP	2007.7	1929.8	-3.9	691.6	679.4	-1.8	1316.1	1250.4	-5.0
Conventional Crude - Other	2066.4	1795.0	-13.1	677.8	611.6	-9.8	1388.6	1183.4	-14.8
Conventional Crude Oil	4074.2	3724.8	-8.6	1369.4	1291.0	-5.7	2704.7	2433.8	-10.0
Oil Sands	1057.1	850.6	-19.5	337.0	291.5	-13.5	720.2	559.0	-22.4
Marketable Natural Gas	2099.7	2315.1	10.3	861.6	987.9	14.7	1238.0	1327.2	7.2
Gas Plant Liquids	714.6	720.1	0.8	265.4	294.7	11.1	449.2	425.3	-5.3
Total (including sulphur)	7945.6	7610.6	-4.2	2833.4	2865.1	1.1	5112.2	4745.4	-7.2

Volume in thousands of cubic metres	Integrateds/Refiners 1987	Integrateds/Refiners 1988	Integrateds/Refiners Change %	Junior O&G Producers 1987	Junior O&G Producers 1988	Junior O&G Producers Change %	Senior O&G Producers 1987	Senior O&G Producers 1988	Senior O&G Producers Change %
Conventional Crude - NORP	5296.8	5901.3	11.4	3759.3	4003.1	6.5	6448.0	7819.0	21.3
Conventional Crude - Other	4711.6	4688.9	-0.5	2309.9	2598.7	12.5	8201.6	8419.7	2.7
Conventional Crude Oil	10008.4	10590.2	5.8	6069.2	6601.8	8.8	14649.6	16238.7	10.8
Oil Sands	5684.8	5876.7	3.4	89.3	204.3	128.8	2463.7	2584.6	4.9
Marketable Natural Gas (10^6m^3)	8127.0	9226.0	13.5	9672.8	12028.5	24.4	16551.9	20222.6	22.2
Gas Plant Liquids	3096.0	3261.5	5.3	783.6	1014.6	29.5	3951.0	4446.3	12.5
Total (including sulphur)	26190.1	28199.2	7.7	16105.2	19237.3	19.4	36643.1	42423.0	15.8
Value in millions of dollars			%			%			%
Conventional Crude - NORP	664.0	623.7	-6.1	481.5	431.0	-10.5	862.2	875.1	1.5
Conventional Crude - Other	658.6	550.9	-16.4	282.8	273.4	-3.3	1125.0	970.7	-13.7
Conventional Crude Oil	1322.6	1174.6	-11.2	764.3	704.4	-7.8	1987.2	1845.9	-7.1
Oil Sands	697.6	533.0	-23.6	11.1	10.5	-5.6	348.4	307.0	-11.9
Marketable Natural Gas	512.1	542.1	5.9	559.9	625.2	11.6	1027.6	1147.8	11.7
Gas Plant Liquids	264.9	257.6	-2.7	63.6	104.8	64.8	386.2	357.7	-7.4
Total (including sulphur)	2797.2	2507.4	-10.4	1399.0	1444.8	3.3	3749.4	3658.4	-2.4

B16

Upstream Operating Costs and Royalties in millions of dollars
First six months

By Province

	Alberta			British Columbia			Saskatchewan		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Field, Well and Gathering Operations	800.7	970.4	21.2	43.6	50.5	15.8	131.0	150.1	14.6
Natural Gas Processing Plants	215.9	249.2	15.4	3.4	3.4	-0.3	7.1	7.5	6.3
Oil Sands	516.9	639.7	23.8	0.0	0.0	-	0.0	0.0	337.5
Taxes (excluding Income Taxes)	42.0	36.7	-12.7	1.6	0.4	-74.9	4.9	4.6	-6.2
Operating Overhead	412.9	367.3	-11.0	10.6	9.2	-13.8	33.2	28.3	-14.5
Total Operating Cost	1988.5	2263.4	13.8	59.2	63.4	7.1	176.1	190.6	8.2
Federal Crown Royalties	0.2	11.0	-	0.0	0.4	-	0.3	0.9	208.4
Provincial Royalties and Taxes	1003.6	976.4	-2.7	55.6	50.5	-9.2	110.5	91.8	-17.0
Non- Crown Royalties and Other	196.8	188.2	-4.4	10.8	9.9	-7.8	29.6	25.8	-13.0
Total Royalties	1200.6	1175.5	-2.1	66.4	60.9	-8.3	140.4	118.5	-15.6

By Company Group

	Total Industry			Canadian Controlled			Foreign Controlled		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Field, Well and Gathering Operations	997.5	1195.7	19.9	400.8	478.5	19.4	596.7	717.2	20.2
Natural Gas Processing Plants	238.7	272.7	14.3	84.4	93.0	10.2	154.3	179.7	16.5
Oil Sands	516.9	639.8	23.8	180.0	230.4	28.0	336.9	409.4	21.5
Taxes (excluding Income Taxes)	48.9	41.8	-14.4	15.7	11.9	-24.7	33.2	30.0	-9.6
Operating Overhead	469.5	418.1	-11.0	139.5	133.4	-4.4	330.0	284.7	-13.7
Total Operating Cost	2271.5	2568.1	13.1	820.5	947.3	15.4	1451.0	1620.9	11.7
Federal Crown Royalties	3.0	15.0	394.2	0.3	0.2	-36.7	2.7	14.8	-
Provincial Royalties and Taxes	1174.4	1122.4	-4.4	380.1	381.1	0.3	794.3	741.3	-6.7
Non-Crown Royalties and Other	242.9	228.6	-5.9	90.6	96.7	6.7	152.4	131.9	-13.4
Total Royalties	1420.4	1366.0	-3.8	471.0	478.0	1.5	949.4	888.0	-6.5

	Integrateds/Refiners			Junior O&G Producers			Senior O&G Producers		
	1987	1988	Change %	1987	1988	Change %	1987	1988	Change %
Field, Well and Gathering Operations	290.5	351.7	21.1	232.9	291.1	25.0	474.1	552.8	16.6
Natural Gas Processing Plants	64.5	73.0	13.3	32.6	26.1	-19.9	141.6	173.6	22.6
Oil Sands	327.0	397.5	21.5	5.8	2.7	-53.2	184.1	239.6	30.1
Taxes (excluding Income Taxes)	15.4	8.4	-45.1	8.4	6.9	-17.9	25.1	26.5	5.5
Operating Overhead	185.3	124.8	-32.7	62.4	75.0	20.3	221.9	218.3	-1.6
Total Operating Cost	882.6	955.4	8.2	342.2	401.9	17.5	1046.8	1210.8	15.7
Federal Crown Royalties	2.1	2.3	9.5	0.3	12.2	0.0	0.6	0.5	-14.2
Provincial Royalties and Taxes	362.2	342.6	-5.4	197.5	196.8	-0.3	614.7	582.9	-5.2
Non- Crown Royalties and Other	91.6	81.7	-10.8	72.4	66.7	-7.9	78.9	80.2	1.6
Total Royalties	455.9	426.7	-6.4	270.2	275.7	2.0	694.2	663.7	-4.4

B17

Reconciliation of Book Income to Taxable Income by Control: 1987

All Canadian Activities *in millions of dollars*

	Total Industry	Canadian-Controlled	Foreign-Controlled	Integrateds & Refiners	Oil & Gas Producers
Book Income after Income Taxes	4137	1134	3003	2836	1301
Income Tax Provision	1761	172	1590	1316	446
Book Income before Income Taxes	5898	1305	4593	4151	1747
Additions:					
PGRT	–	–	–	–	–
Depreciation and Amortization	2524	1195	1329	1306	1218
Depletion	1641	1290	350	301	1339
Current E&D Expenses	616	37	578	164	452
Non-Deductible Crown Royalties	2403	1022	1381	728	1675
Loss on Disposal of Assets per Books	90	72	18	32	57
Taxable Capital Gain	331	208	123	150	181
Research and Development Expenditures	20	14	6	12	8
Other Additions	4168	3349	819	610	3558
Deductions:					
Capital Cost Allowance	2858	1406	1451	1537	1321
Indirect E&D Overhead Expensed	45	41	4	- -	45
Resource Allowance	2150	978	1172	641	1509
Interest Expensed for Tax Purpose	121	87	34	35	86
Canadian Exploration Expense Claim	1131	434	698	325	807
Canadian Development Expense Claim	1030	535	496	308	722
Canadian Oil and Gas Property Expense Claim	459	235	224	128	331
Earned Depletion Allowance	254	89	166	144	110
Foreign E&D Expense Claim	77	66	11	14	63
Canadian E&D Expense Claim	2	1	1	–	2
Frontier Exploration Allowance	–	–	–	–	–
Supplementary Depletion Allowance	–	–	–	–	–
Gain on Disposal of Assets per Books	423	266	156	156	267
Cumulative Offset Account Deduction	10	10	0	0	10
Other Deductions	3049	1618	1431	1696	1354
Total Net Difference between Book Income before Income Taxes and Current Year Net Income for Income Tax Purposes	184	1422	-1238	-1679	1862
Current Year Net Income for Income Tax Purposes	6082	2727	3354	2472	3609
Deduct:					
Non-Capital Losses	732	382	350	301	430
Taxable Dividends	2327	1756	571	551	1776
Other Deductions	96	43	53	44	52
Taxable Income (Net of losses)	2944	558	2386	1576	1368
Add:					
Current Year Non-Capital Losses	947	634	313	300	647
Taxable Income (Tax base)	3891	1192	2699	1876	2015
Tax Credits:					
Federal Tax Abatement	339	93	246	165	173
Manufacturing and Processing Profits Deductions	74	6	67	57	17
Foreign Tax Credit	1	1	0	0	0
Scientific Research and Experimental Development Tax Credit	4	4	0	3	1
Share-Purchase Tax Credit	–	–	–	–	–
Investment Tax Credit	145	33	112	106	39
'Exploration Tax Credit'	21	20	1	14	7
Other Federal Tax Credit	12	11	1	11	1
Income Tax Payable:					
Total Federal Tax	1150	286	864	552	598
Provincial Tax before Rebates and Credits	411	95	316	212	199
Net Provincial Tax	171	-40	211	158	14
Total Income Taxes	1322	246	1075	710	612
Non-Capital Losses					
Opening Balance	1297	1023	274	214	1083
Current Year's Losses	947	634	313	300	647
Losses from Predecessors	82	45	37	37	45
Utilized during the year (1)	743	384	359	306	437
Expired during the year	27	22	5	2	25
Carried Back	108	44	64	27	81
Closing Balance	1457	1252	206	226	1232

(1) Includes non-capital losses used during the year to reduce Part IV taxes.

B18

Reconciliation of Book Income to Taxable Income by Control: 1987
Upstream Activities *in millions of dollars*

	Total Industry	Canadian-Controlled	Foreign-Controlled	Integrateds & Refiners	Oil & Gas Producers
Book Income after Income Taxes	2721	696	2025	1484	1237
Income Tax Provision	1149	-135	1284	738	410
Book Income before Income Taxes	3870	561	3309	2222	1648
Additions:					
PGRT	–	–	–	–	–
Depreciation and Amortization	1604	743	861	567	1037
Depletion	1571	1220	350	242	1329
Current E&D Expenses	597	37	560	159	438
Non-Deductible Crown Royalties	2402	1022	1381	728	1675
Loss on Disposal of Assets per Books	38	25	13	–	38
Taxable Capital Gain	91	11	79	12	78
Research and Development Expenditures	7	3	4	–	7
Other Additions	2486	1878	608	203	2283
Deductions:					
Capital Cost Allowance	1731	904	828	634	1097
Indirect E&D Overhead Expensed	45	41	4	–	45
Resource Allowance	2140	967	1173	641	1499
Interest Expensed for Tax Purpose	87	65	22	21	65
Canadian Exploration Expense Claim	1109	427	683	319	790
Canadian Development Expense Claim	1022	529	493	307	715
Canadian Oil and Gas Property Expense Claim	455	231	224	128	327
Earned Depletion Allowance	247	86	161	142	105
Foreign E&D Expense Claim	76	65	11	14	62
Canadian E&D Expense Claim	2	1	1	–	2
Frontier Exploration Allowance	–	–	–	–	–
Supplementary Depletion Allowance	–	–	–	–	–
Gain on Disposal of Assets per Books	190	119	71	21	169
Cumulative Offset Account Deduction	10	10	- -	0	10
Other Deductions	1945	644	1301	806	1139
Total Net Difference between Book Income before Income Taxes and Current Year Net Income for Income Tax Purposes	-264	850	-1114	-1124	860
Current Year Net Income for Income Tax Purposes	3606	1411	2195	1099	2507
Deduct:					
Non-Capital Losses	433	339	94	24	409
Taxable Dividends	601	407	194	136	464
Other Deductions	27	12	14	1	26
Taxable Income (Net of losses)	2553	655	1898	937	1615
Add:					
Current Year Non-Capital Losses	636	562	74	69	567
Taxable Income (Tax base)	3188	1216	1972	1006	2182
Tax Credits:					
Federal Tax Abatement	258	77	181	86	172
Manufacturing and Processing Profits Deductions	29	1	28	14	15
Foreign Tax Credit	0	0	–	0	0
Scientific Research and Experimental Development Tax Credit	1	1	0	–	1
Share-Purchase Tax Credit	–	–	–	–	–
Investment Tax Credit	76	24	51	41	35
'Exploration Tax Credit'	21	20	1	14	7
Other Federal Tax Credit	12	11	1	11	1
Income Tax Payable:					
Total Federal Tax	961	223	738	391	570
Provincial Tax before Rebates and Credits	288	65	223	104	183
Net Provincial Tax	67	-58	125	68	-2
Total Income Taxes	1028	165	863	460	568
Non-Capital Losses					
Opening Balance	808	661	147	23	785
Current Year's Losses	636	562	74	69	567
Losses from Predecessors	62	45	18	18	45
Utilized during the year (1)	422	330	92	24	398
Expired during the year	10	5	5	2	8
Carried Back	42	8	34	18	24
Closing Balance	1038	930	108	66	973

(1) Includes non-capital losses used during the year to reduce Part IV taxes.

B19

Reconciliation of Book Income to Taxable Income by Control: 1986
All Canadian Activities *in millions of dollars*

	Total Industry	Canadian-Controlled	Foreign-Controlled	Integrateds & Refiners	Oil & Gas Producers
Book Income after Income Taxes	1027	-624	1651	1780	-753
Income Tax Provision	952	-20	972	902	50
Book Income before Income Taxes	1979	-644	2623	2682	-703
Additions:					
PGRT	481	252	229	112	369
Depreciation and Amortization	2854	1608	1245	1368	1486
Depletion	1510	1250	260	108	1402
Current E&D Expenses	864	163	700	229	635
Non-Deductible Crown Royalties	2228	1114	1114	570	1658
Loss on Disposal of Assets per Books	513	498	15	7	506
Taxable Capital Gain	185	128	57	-0	186
Research and Development Expenditures	-	-	-	-	-
Other Additions	5381	4279	1103	1401	3981
Deductions:					
Capital Cost Allowance	2413	1445	968	1226	1187
Indirect E&D Overhead Expensed	77	61	15	14	63
Resource Allowance	1742	902	841	444	1299
Interest Expensed for Tax Purpose	159	112	47	48	111
Canadian Exploration Expense Claim	1210	321	889	538	672
Canadian Development Expense Claim	982	555	426	267	715
Canadian Oil and Gas Property Expense Claim	350	234	116	53	296
Earned Depletion Allownace	240	104	135	100	140
Foreign E&D Expense Claim	69	54	15	12	57
Canadian E&D Expense Claim	1	0	1	0	1
Frontier Exploration Allowance	7	7	-	-	7
Supplementary Depletion Allowance	12	6	6	-	12
Gain on Disposal of Assets per Books	296	229	67	74	223
Cumulative Offset Account Deduction	3	3	-	0	3
Other Deductions	2860	1601	1259	1547	1313
Total Net Difference between Book Income before Income Taxes and Current Year Net Income for Income Tax Purposes	3596	3660	-64	-528	4123
Current Year Net Income for Income Tax Purposes	5573	3014	2558	2154	3419
Deduct:					
Non-Capital Losses	729	597	131	249	480
Taxable Dividends	3250	2482	768	827	2423
Other Deductions	160	143	17	19	140
Taxable Income (Net of losses)	1434	-207	1642	1059	375
Add:					
Current Year Non-Capital Losses	1111	880	231	95	1016
Taxable Income (Tax base)	2545	673	1873	1154	1392
Tax Credits:					
Federal Tax Abatement	226	56	171	104	123
Manufacturing and Processing Profits Deductions	87	8	80	71	16
Foreign Tax Credit	8	1	7	0	8
Scientific Research and Experimental Development Tax Credit	-	-	-	-	-
Share-Purchase Tax Credit	9	0	8	8	0
Investment Tax Credit	228	52	176	168	60
'Exploration Tax Credit'	3	3	0	2	1
Other Federal Tax Credit	23	23	0	13	10
Income Tax Payable:					
Total Federal Tax	654	130	524	270	384
Provincial Tax before Rebates and Credits	250	54	196	129	121
Net Provincial Tax	16	-66	82	94	-78
Total Income Taxes	670	64	606	363	306
Non-Capital Losses					
Opening Balance	1050	778	271	402	648
Current Year's Losses	1111	880	231	95	1016
Losses from Predecessors	199	198	0	8	191
Utilized during the year(1)	729	597	131	249	480
Expired during the year	61	54	6	5	55
Carried Back	104	15	89	15	89
Closing Balance	1466	1191	275	235	1231

(1) Includes non-capital losses used during the year to reduce Part IV taxes.

B20

Reconciliation of Book Income to Taxable Income by Control: 1986
Upstream Activities *in millions of dollars*

	Total Industry	Canadian-Controlled	Foreign-Controlled	Integrateds & Refiners	Oil & Gas Producers
Book Income after Income Taxes	335	- 466	801	633	- 299
Income Tax Provision	324	- 341	665	343	- 19
Book Income before Income Taxes	659	- 806	1465	977	- 318
Additions:					
PGRT	480	252	228	112	368
Depreciation and Amortization	1826	1022	805	570	1256
Depletion	1483	1225	258	108	1375
Current E&D Expenses	832	163	668	225	607
Non- Deductible Crown Royalties	2228	1114	1114	570	1658
Loss on Disposal of Assets per Books	202	188	13	5	196
Taxable Capital Gain	200	139	61	1	199
Research and Development Expenditures	–	–	–	–	–
Other Additions	2316	1534	782	601	1716
Deductions:					
Capital Cost Allowance	1617	866	751	616	1002
Indirect E&D Overhead Expensed	76	61	15	14	63
Resource Allowance	1734	891	843	444	1290
Interest Expensed for Tax Purpose	126	85	41	31	95
Canadian Exploration Expense Claim	1190	314	875	538	652
Canadian Development Expense Claim	974	551	422	267	707
Canadian Oiland Gas Property Expense Claim	350	234	116	53	296
Earned Depletion Allownace	239	104	135	100	140
Foreign E&D Expense Claim	66	50	15	12	54
Canadian E&D Expense Claim	1	–	1	0	1
Frontier Exploration Allowance	7	7	–	–	7
Supplementary Depletion Allowance	12	6	6	–	12
Gain on Disposal of Assets per Books	95	65	30	9	85
Cumulative Offset Account Deduction	3	3	–	0	3
Other Deductions	1691	816	875	563	1128
Total Net Difference between Book Income before Income Taxes and Current Year Net Income for Income Tax Purposes	1386	1583	- 196	- 456	1842
Current Year Net Income for Income Tax Purposes	2044	775	1269	521	1523
Deduct:					
Non-Capital Losses	498	442	56	43	454
Taxable Dividends	510	316	194	252	258
Other Deductions	144	135	8	7	136
Taxable Income (Net of losses)	892	- 118	1011	218	674
Add:					
Current Year Non-Capital Losses	829	664	165	45	783
Taxable Income (Tax base)	1721	546	1175	264	1458
Tax Credits:					
Federal Tax Abatement	134	23	111	25	109
Manufacturing and Processing Profits Deductions	26	3	24	10	16
Foreign Tax Credit	3	0	2	–	3
Scientific Research and Experimental Development Tax Credit	–	–	–	–	–
Share-Purchase Tax Credit	8	–	8	8	–
Investment Tax Credit	92	39	53	35	57
'Exploration Tax Credit'	3	3	0	2	1
Other Federal Tax Credit	15	15	0	8	7
Income Tax Payable:					
Total Federal Tax	386	36	351	50	336
Provincial Tax before Rebatesand Credits	131	23	108	26	105
Net Provincial Tax	- 93	- 95	2	- 1	- 91
Total Income Taxes	294	- 59	353	48	245
Non-Capital Losses					
Opening Balance	403	300	102	39	364
Current Year's Losses	829	664	165	45	783
Losses from Predecessors	198	198	–	7	190
Utilized during the year(1)	498	442	56	43	454
Expired during the year	60	54	6	5	55
Carried Back	92	11	81	14	78
Closing Balance	779	655	124	29	750

(1) Includes non-capital losses used during the year to reduce Part IV taxes.

B21

Current Year Claims and Tax Pools Remaining: 1987 in millions of dollars

	Canadian-Controlled		Foreign-Controlled		Total Industry	
	Upstream	Total	Upstream	Total	Upstream	Total
CCA – Class 10						
Opening Balance	2089	2387	1739	1975	3828	4361
Net Additions	446	487	617	679	1063	1166
Government Assistance	21	21	18	18	39	39
Adjustments	15	– 3	118	109	133	105
Claimed In Current Period	512	557	577	630	1089	1187
Closing Balance	2019	2293	1878	2115	3897	4408
CCA – Class 28						
Opening Balance	45	160	126	269	171	429
Net Additions	78	89	74	161	152	250
Government Assistance	3	3	0	15	3	18
Adjustments	0	– 0	2	8	2	8
Claimed In Current Period	81	86	145	196	226	282
Closing Balance	39	160	57	227	96	387
CCA – Class 29						
Opening Balance	478	1523	81	807	559	2330
Net Additions	34	131	108	307	142	438
Government Assistance	1	12	3	18	4	30
Adjustments	– 2	– 4	21	– 10	19	– 14
Claimed In Current Period	257	487	63	404	320	892
Closing Balance	251	1150	145	682	396	1832
CCA – All Other Classes						
Opening Balance	584	2389	349	1868	933	4257
Net Additions	– 17	171	18	336	1	507
Government Assistance	0	2	1	1	1	3
Adjustments	58	7	34	7	92	14
Claimed In Current Period	53	275	44	222	97	497
Closing Balance	571	2289	357	1988	928	4277
Investment Tax Credit						
Opening Balance	92	119	21	98	113	217
ITC Earned	38	49	52	97	90	146
Adjustments	– 12	– 17	4	3	– 8	– 14
ITC Claimed and/or Refunded	26	39	47	144	73	183
Closing Balance	92	112	30	54	122	166
'Exploration Tax Credit'						
Opening Balance	8	8	–	–	8	8
'ETC' Earned	29	29	1	1	30	30
Adjustments	–	–	–	–	–	–
'ETC' Claimed and/or Refunded	21	21	1	1	22	22
Closing Balance	16	16	–	–	16	16
CCEE						
Opening Balance	939	1079	533	533	1473	1613
Net Additions	1084	1097	721	749	1806	1845
Government Assistance – 'ETC'	17	17	2	2	19	19
Government Assistance – Other	257	257	10	10	267	267
Adjustments	– 11	– 11	– 6	– 6	– 18	– 18
Claimed In Current Period	424	431	684	698	1108	1130
Transferred To COA	–	–	–	–	–	–
Closing Balance	1314	1459	553	565	1866	2024

B21 (continued)

Current Year Claims and Tax Pools Remaining: 1987 in millions of dollars

	Canadian-Controlled		Foreign-Controlled		Total Industry	
	Upstream	Total	Upstream	Total	Upstream	Total
CCDE						
Opening Balance	1721	1746	1252	1257	2972	3003
Net Additions	547	549	450	450	997	1000
Government Assistance	42	42	9	9	51	51
Adjustments	-23	-24	-53	-53	-77	-77
Claimed in Current Period	529	535	492	495	1021	1030
Transferred to COA	..	..	..	..	..	..
Closing Balance	1673	1694	1147	1151	2820	2845
Cummulative Offset Account (COA)						
Opening Balance	710	710	83	83	793	793
Designated CEE Additions	..	..	..	..	..	..
Designated CDE Additions	..	..	..	..	..	..
Adjustments	16	17	5	5	21	21
Claimed in Current Period	10	..	..	..	10	..
Closing Balance	716	717	87	87	804	804
CCOGPE						
Opening Balance	1822	1890	1657	1657	3479	3547
Net Additions	684	725	734	734	1418	1459
Adjustments	34	-17	169	169	204	153
Claimed in Current Period	231	235	224	224	455	459
Closing Balance	2310	2364	2336	2336	4646	4700
Earned Depletion Base						
Opening Balance	906	910	912	925	1818	1835
Net Additions	75	76	140	176	215	252
Adjustments	86	85	-11	1	75	86
Claimed in Current Period	89	89	161	166	250	254
Closing Balance	979	982	879	936	1858	1918
Foreign E&D Expenses						
Opening Balance	524	528	84	84	608	612
Net Additions	70	70	0	0	70	70
Claimed in Current Period	65	65	11	11	76	76
Closing Balance	529	532	73	73	602	605
Canadian E&D Expenses						
Opening Balance	13	15	13	13	26	28
Adjustments	12	12	..	..	12	12
Claimed in Current Period	0	0	1	1	1	1
Closing Balance	25	27	12	12	37	39
Supplementary Depletion Allowance						
Opening Balance	4	4	3	3	7	7
Claimed in Current Period	..	..	..	..	..	..
Closing Balance	4	4	3	3	7	7
Frontier Exploration Allowance						
Opening Balance	153	153	9	9	162	162
Claimed in Current Period	..	..	..	..	..	..
Closing Balance	153	153	9	9	162	162
Memo Items						
Resource Profits for Resource Allowance	3748	3795	4538	4538	8285	8333
Production Royalties Received	93	93	37	37	130	130
Production Royalties Paid	136	136	273	276	409	412
Interest Capitalized for Tax Purposes	13	14	11	11	24	25
Interest Expensed for Tax Purposes	1226	1517	444	649	1670	2166
Canadian Manufacturing and Processing Profits	42	83	266	673	308	756

Appendix C Glossary of Terms

Acquisitions – the acquisition of shares of other petroleum companies or the purchase of assets from such companies. Capital outlays for these purposes are included under the category 'All Other Uses of Funds' in monitoring reports. *(Acquisitions)*

All Other Sources of Funds – proceeds from the sale of assets or long-term investments and pre-payments received for future production and the reclassification of sizeable short-term debt to long-term such as occurred in 1984. *(Autres sources de fonds)*

All Other Uses of Funds includes acquisitions, purchases of used machinery and equipment, and long-term investments. *(Autres affectations de fonds)*

Amortization – the charge to expense, over time, of assets, other than through depreciation, depletion, and exploration and development expensed to current operations. It also includes gains or losses on disposal of assets and write-downs of assets. *(Amortissement)*

Canada Lands – physical areas of Canada outside provincial boundaries. *(Terres du Canada)*

Canadian Control – in general, a company is Canadian-controlled when 50% or more of its voting shares are held by Canadian residents either directly or indirectly. In a few exceptional cases, when a significant block of shares is held by Canadian residents and the remaining shares are widely held, a company may be effectively Canadian-controlled even though more than 50% of the voting shares are held by non-residents. *(Contrôle canadien)*

Canadian Exploration and Development Incentive Program (CEDIP) – provides direct assistance to companies conducting exploration and development activities in Canada. Beginning April 1, 1987, CEDIP provides a cash payment for 33 1/3 % of exploration and development expenses anywhere in Canada, up to a maximum of $10 million annually per company. Fiscal measures proposed under the Income Tax Reform of June 1987, provide for the phasing out of the program over approximately the same period as earned depletion; i.e. expenses incurred after October 1, 1988 and ending before June 30, 1989 will receive a 25% incentive rate, and this rate will be decreased to 16 2/3% after June 30, 1989 until the termination date of December 31, 1989. *(Le programme canadien d'encouragement à l'exploration et à la mise en valeur)*

Canadian Exploration Incentive Program (CEIP) – provides up to $3 million in incentives per corporation for each calendar year, based on 30% of eligible expenses to a ceiling of $10 million a year. The $10 million limit is for both the CEIP and CEDIP programs. The CEIP program began for oil and gas exploration on October 1, 1988 when the incentive rate for the CEDIP program fell to 25%. CEIP incentives are limited to exploration expenses incurred under flow-through agreements, where the corporation and the investor are at arms's length. *(Le programme canadien d'encouragement à l'exploration)*

Canadian Ownership – the proportion of the total voting shares of a company held, either directly or indirectly (through other corporations), by Canadian residents. *(Participation canadienne)*

Capital Employed – the net book value of total assets, less current liabilities. *(Capital utilisé)*

Capital Expenditures – investments in new machinery, equipment, structures and resource properties, whether capitalized or charged directly to current operations, as well as intangibles (e.g. cost of leased equipment), capitalized interest and capitalized repair expenditures. *(Dépenses de capital)*

Current Income Tax – the portion of the provision for income taxes, both federal and provincial, pertaining to the reporting period and assumed to be currently due. *(Impôt sur le revenu courant)*

Debt/Equity Ratio – the ratio of long-term liabilities (over one year) to shareholders' equity (share capital plus retained earnings) at the end of a period. Depending upon their terms and conditions, preferred shares may be classified as either debt or equity (see 'long-term debt'). *(Rapport d'endettement)*

Deferred Income Taxes – taxes accrued and reflected as an expense in the income statement, but not payable in the financial reporting period. Income taxes are deferred, for example, when companies write off capital assets (using capital cost allowances) for income tax purposes at rates that exceed those employed in preparing their financial reports. *(Impôt reporté)*

Depletion – the amount charged to expense in the company's financial statements which relates to depletable assets that have been capitalized. This is not the earned depletion allowance calculated for income tax purposes. *(Epuisement)*

Depreciation – the amount charged to expense which relates to depreciable assets that have been capitalized. This is not the amount of capital cost allowance that is used to compute depreciation for income tax purposes. *(Dépréciation)*

Development Expenditures – includes drilling and well completion costs in an area of already proven oil or natural gas reserves, expenditures on field gathering and separation systems, and the cost of acquiring proven reserves. (Dépenses de mise en valeur)

Downstream Segment – includes refining, marketing, transportation and petrochemical operations. *(Secteur aval)*

Energy Mining – uranium and coal mining (excludes oil sands mining). *(Extraction minière des ressources énergétiques)*

Equity – the book value of shareholders' paid-up capital, contributed surplus and retained earnings. *(Avoir propre)*

Exploration Costs – include all lease fees and land acquisition costs, geological and geophysical expenditures, and exploratory drilling costs whether capitalized or expensed. Exploratory drilling is generally defined as the drilling of a well outside a proven area, or within a proven area but to a previously untested zone, in order to determine whether oil or gas reserves exist. Also included are costs of dry wells, casing and other materials and equipment abandoned in place. (Frais d'exploration)

External Sources of Funds – funds obtained from sources other than internal cash flow. Long-term debt and equity are the main examples. *(Sources externes de fonds)*

Flow-through Shares – a financial vehicle that allows a resource company to issue shares and thereby raise funds for exploration and development expenditures. In turn, the company renounces the associated tax expenses such as Canadian exploration expenses (CEE), Canadian development expenses (CDE) and Canadian oil and gas property expenses (COGPE) to the purchasers of the flow-through shares. Flow-through arrangements permit investors to deduct resource expenses incurred by the issuing corporation against income from other sources. *(Actions accréditives)*

Full Cost Accounting – an accounting method by which all costs incurred in prospecting for reserves and in acquiring, exploring and developing properties within cost centres are initially capitalized and only charged to expense as the reserves deemed to be related to those costs are produced. Costs incurred include prospecting, leasing, acquisition, retention, exploration and development costs, and associated indirect costs (i.e. general and administrative costs). Operating costs are expensed as incurred. *(Méthode de capitalisation du coût entier)*

Integrated Companies – individual companies that have significant revenues in both the upstream and downstream segments. *(Sociétés intégrées)*

Internal Cash Flow – net income after tax plus exploration and development expenditures expensed in the current period, depreciation, depletion, amortization and deferred income taxes. *(Ressources d'autofinancement)*

Junior Producers – companies that are predominantly exploration and production oriented and that individually generate less than 1% of industry upstream revenues. *(Petits producteurs)*

Long-term Debt – debt that has a maturity date greater than one year. Preferred shares may be treated as long-term debt when they are redeemable for a fixed amount without conversion privileges or voting rights. *(Dette à long terme)*

Non-cash Charges – items expensed in the reporting period that do not require an actual financial outlay in that period, such as depreciation, depletion and amortization. *(Frais non monétaires)*

Non-conventional Heavy Oil – deposits of oil of a density usually greater than 934 kg/m^3 that are for the most part recoverable through enhanced recovery methods. Canadian deposits of heavy oil are typically in the range of 935 to 985 kg/m^3. Main centres are Cold Lake and Lloydminster. *(Pétrole lourd non classique)*

Oil Sands – crude bitumen resources from deposits that are generally solid unless heated and are of a density usually greater than 985 kg/m^3. Athabasca, Peace River, Wabasca, Cold Lake and Buffalo Head Hills are the main Canadian resource areas. *(Sables pétrolifères)*

Other Canadian Operations – include drilling services, coal and uranium mining, metal mining, and other non-petroleum related activities. In addition, corporate activities may be included here. *(Activités autres au Canada)*

Petroleum Incentives Program (PIP) – provided direct incentive payments to enterprises conducting exploration and development activities in Canada. The level of incentive varied according to the area of activity and was higher for enterprises that were Canadian controlled and had specified levels of Canadian ownership as determined under the Canadian Ownership and Control Determination Act. The Government of Alberta administered and paid incentives for activities within Alberta, and the Petroleum Incentives Administration of the Government of Canada funded and administered the program elsewhere in Canada. Fiscal measures agreed upon under the Western Accord included the termination of the PIP program on March 31, 1986 for all activities formerly eligible to receive grants, other than exploration expenses incurred in drilling frontier wells required to satisfy commitments under existing Exploration Agreements on Canada Lands. These eligible frontier wells continued to qualify for PIP during a further grandfathering period which was terminated December 31, 1987. *(Programme d'encouragement du secteur pétrolier)*

Petroleum and Gas Revenue Tax (PGRT) – a tax on production revenue net of operating costs, non-Crown royalties and, where Crown royalties or taxes based on production were payable, a 25% resource allowance. Qualifying tertiary recovery projects also reduced the tax base by eligible capital costs incurred after 1982 to the extent of pool taxable revenue. In April 1986, the existing $500,000 small producers' credit was increased to $2 million and the deduction for individuals of $10,000 of resource income from the PGRT was increased to $40,000. The Syncrude and Suncor oil sands plants were also granted a zero rate of PGRT until the end of 1986. Companies in a non-profit position were allowed to offset unused new exploration and development expenditures against the PGRT. The Western Accord would have phased PGRT out of existence by January 1, 1989, but on September 8, 1986 the Government of Canada announced its termination effective October 1, 1986. PGRT was non-deductible for income tax purposes. *(Taxe sur les recettes pétrolières et gazières)*

Production Expenditures – all expenditures relating to the production of crude oil and natural gas. Expenditures on natural gas processing plants are included. *(Dépenses de production)*

Senior Producers – companies that are predominantly exploration and production oriented and that individually generate more than 1% of industry upstream revenues. *(Grands producteurs)*

Successful Efforts Accounting – an accounting method by which only costs resulting directly in identifiable future benefits through discovery, acquisition or development of reserves are capitalized. Costs that do not provide identifiable future benefits are expensed as incurred, or are written off when the properties are determined to be non-productive. Such costs include those relating to geological and geophysical studies, retention of undeveloped properties, and non-productive exploration and development efforts. *(Méthode de capitalisation du coût de la recherche fructueuse)*

Upstream Segment – activities and operations related to the search for, and development, production, extraction and recovery of crude oil, natural gas, natural gas liquids and sulphur, as well as the production of synthetic oil. *(Secteur en amont)*

Working Capital – current assets (cash, short-term investments, accounts receivable, inventories) less current liabilities (accounts payable, debts and obligations maturing in less than one year). *(Fonds de roulement)*

Income Tax-Related Definitions

Capital Cost Allowance (CCA) – is the income tax equivalent of accounting depreciation. A taxpayer is permitted to deduct certain allowances in respect of the capital cost of depreciable property to the extent prescribed by the Income Tax Regulations (ITR). The June 1987 Tax Reform reduced the CCA rates for certain types of property to bring their CCA rate more in line with actual depreciation rates. It also introduced the put-in-use rule for property acquired after 1989. According to this rule, taxpayers cannot claim CCA and the investment tax credit is not earned until the earliest of either the year the asset is put in use or the year in which the construction is completed and it is ready for use. *(Allocations du coût en capital)*

Some of the more relevant classes of Capital Cost Allowance for the oil and gas, and mining industries are:

Class 10 – includes assets such as oil and gas well equipment, drilling rigs (except offshore drilling vessels), certain geophysical equipment, heavy oil upgrading equipment, and certain tangible assets acquired in connection with oil and gas exploration and development not included as a Canadian Exploration Expense or a Canadian Development Expense (see below) (ref: Schedule II of the ITR). *(Catégorie 10)*

Class 28 – includes assets used in the gaining or producing of income from new mines or major expansions of mines (including oil sands deposits) (ref: Schedule II of the ITR). *(Catégorie 28)*

Class 29 – includes assets manufactured or acquired by the taxpayer and used directly or indirectly by the taxpayer in Canada primarily in the manufacturing or processing of goods for sale or lease (ref: Schedule II of the ITR). *(Catégorie 29)*

Depletion:

Earned Depletion Allowance – a deduction from income not exceeding the lesser of either 25% of resource profits for earned depletion purposes or the earned depletion base. The Tax Reform proposals phased out the balance of earned depletion in two stages ending December 31, 1989 (ref: ITR 1201). *(Déduction pour épuisement gagné)*

Earned Depletion Base – an amount, net of prior years earned depletion allowances claimed, equal to 33-1/3% of qualifying prescribed expenditures. Qualifying prescribed expenditures include integrated oil sands projects, enhanced recovery projects and heavy crude oil upgraders. For 1984, the additions to the earned depletion base also include 10% of Canadian Exploration Expenses incurred on Canada Lands (ref: ITR 1205). *(Base de la déduction pour épuisement gagné)*

Mining Exploration Depletion Allowance – a deduction from income not exceeding the lesser of either 25% of income from any source or the mining exploration depletion base (ref: Draft ITR 1203(1)). *(Déduction à l'égard d'épuisement pour exploration minière)*

Mining Exploration Depletion Base – an amount, net of prior year mining exploration depletion allowances claimed, equal to 33-1/3% of Canadian Exploration Expenses incurred after April 19, 1983 (ref: Draft ITR 1203(2)). *(Base d'exploration minière pour épuisement)*

Exploration, Development and Property Acquisition Costs:

Canadian Development Expense (CDE) – any expense, other than a Canadian Exploration Expense (see below), incurred in drilling or completing an oil or gas well prior to the commencement of production in commercial quantities from the well, or in drilling or converting a well to dispose of waste liquids or to inject materials to assist in the recovery of petroleum and natural gas from another well. Also included is the expense of drilling or recompleting a well after production in commercial quantities has commenced, expenses incurred before November 17, 1978 in bringing a mineral resource into production, and the expense of acquiring a mineral resource in Canada other than payments made for the preservation of a mineral resource property (ref: Paragraph 66.2(5)(a) of the Income Tax Act (ITA)). *(Frais d'aménagement au Canada)*

Cumulative Canadian Development Expense (CCDE) – a "pool" equal to the aggregate of all previously incurred CDE less specified amounts. These specified amounts include amounts of CCDE previously deducted in computing income for tax purposes and the aggregate of related federal and provincial government assistance or benefits received (eg. PIP development grants) (ref. Paragraph 66.2(5)(b) of the ITA). *(Frais cumulatifs d'aménagement au Canada)*

Deduction for CCDE – a deduction which is available in respect of CCDE which permits all taxpayers to deduct an amount not exceeding 30% of their CCDE pool balance in computing income for tax purposes (ref: Subsection 66.2(2) of the ITA). *(Déduction pour frais d'aménagement cumulatifs engagés au Canada)*

Canadian Exploration Expense (CEE) – any expense incurred in determining the existence, location, extent or quality of an accumulation of petroleum or natural gas, or a mineral resource in Canada. CEE includes geological, geophysical and geochemical expenses and any expense relating to the first well capable of commercial production that is drilled in an area where hydrocarbons were not previously known to exist. Effective April 1, 1987 several modifications were made providing taxpayers an additional six months following the end of a taxation year to determine whether a well has been abandoned or resulted in a discovery of a new accumulation. The production criterion has been revised so that production is considered "commercial" only if it is in excess of amounts required for testing or other "prescribed" uses. Special provisions apply for capped or shut in wells with no production from an accumulation known to exist as well as for wells being reclassified from CDE. Also, wells costing in excess of $5 million, that are not producible within two years after completion of drilling, receive exploration treatment from the outset. Expenses incurred after November 16, 1978 in bringing a mineral resource into production are also included (ref: Paragraph 66.1(6)(a) of the ITA). *(Frais d'exploration au Canada)*

Cumulative Canadian Exploration Expense (CCEE) – a "pool" equal to the aggregate of all previously incurred CEE less specified amounts. These specified amounts include amounts of CCEE previously deducted in computing income for tax purposes and the aggregate of related federal and provincial government assistance or benefits received (e.g. PIP exploration grants) (ref: Paragraph 66.1(6)(b) of the ITA). *(Frais cumulatifs d'exploration au Canada)*

Deduction for CCEE – a principal business corporation (ref: Paragraph 66(15)(h) of the ITA) must deduct its balance of CCEE in computing income for tax purposes to the extent that it has income. It may not, however, create a non-capital loss (see below) through its claim for CCEE (ref: Subsection 66.1(2) of the ITA). A non-principal business corporation and all other taxpayers may deduct 100% of their CCEE pool balance in computing income for tax purposes and may create a non-capital loss thereby (ref: Subsection 66.1(3) of the ITA). *(Déduction pour frais cumulatifs d'exploration au Canada)*

Canadian Oil and Gas Property Expense (COGPE) – any expense incurred in acquiring any right, licence or privilege to explore for, drill for or take petroleum, natural gas or related hydrocarbons in Canada, any oil or gas well in Canada, or any rental or royalty computed by reference to the amount or value of production from an oil or gas well in Canada other than a payment made for the preservation of such property (ref: Paragraph 66.4(5)(a) of the ITA). *(Frais à l'égard de biens canadiens relatifs au pétrole et au gaz)*

Cumulative Canadian Oil and Gas Property Expense (CCOGPE) – a "pool" equal to the aggregate of all previously incurred COGPE less specified amounts. These specified amounts include amounts of CCOGPE previously deducted in computing income for tax purposes and the aggregate of related federal and provincial government assistance or benefits received (ref: Paragraph 66.4(5)(b) of the ITA). *(Frais cumulatifs à l'égard de biens canadiens relatifs au pétrole et au gaz)*

Deduction for CCOGPE – a deduction which is available in respect of CCOGPE which permits all taxpayers to deduct an amount not exceeding 10% of their CCOGPE pool balance in computing income for tax purposes (ref: Subsection 66.4(2) of the ITA). *(Déduction pour frais cumulatifs à l'égard de biens canadiens relatifs au pétrole et au gaz)*

Cumulative Offset Account (COA) – a deduction which allows companies to use write-offs associated with exploration and development expenditures incurred after March 31, 1985 – which are not immediately claimable under federal corporation income tax – to shelter net production revenue from PGRT during the PGRT phase-out period. For PGRT purposes, a corporation is entitled to claim a tax credit equal to the lesser of either the PGRT payable or 30% of the amount by which the current COA exceeds the immediately preceding year's COA. *(Compte compensatoire cumulatif)*

Foreign Exploration and Development Expense (FEDE) – a deduction which is available in respect of exploration, development and property acquisition costs, including payments made for the preservation of a foreign resource property, incurred by a corporation in a country other than Canada. Where the corporation has foreign production or royalty income in excess of 10% of the corporation's FEDE, the deduction must equal the amount of that income. Where the production or royalty income is less than 10% of the corporation's FEDE, the deduction must equal 10% of the FEDE. FEDE carried over to a subsequent year is reduced by the amount that was deductible in a previous year, whether or not the amount was actually claimed (ref: Subsection 66(4) of the ITA). *(Frais d'exploration et d'aménagement étrangers)*

Gains and Losses:

Allowable Business Investment Loss – one-half of the loss arising from the arm's length disposition of a capital asset which is a share of a capital stock of a Canadian Controlled Private Corporation (CCPC), a debt owing to the taxpayer by a CCPC, shares of any corporation which has become bankrupt during the previous year, or a debt owing to the taxpayer which the taxpayer has determined to be a bad debt in the year (ref: Paragraphs 38(c) and 39(1)(c) of the ITA). *(Perte déductible au titre d'un placement d'entreprise)*

Allowable Capital Loss – one-half of the loss arising from the disposition of a capital asset where, at the time of disposition, the adjusted cost base of the asset exceeds the proceeds of disposition (ref: Paragraphs 38(b) and 40(1)(b) of the ITA). *(Perte en capital déductible)*

Foreign Exchange Gains/Losses – gains or losses resulting from currency fluctuations relative to Canadian currency on assets or liabilities denominated in foreign currency which are held by the corporation throughout the year. These may be treated as capital gains or losses or income gains or losses on realization (ref: Interpretation Bulletin 95R). *(Pertes ou gains relatifs aux monnaies étrangères)*

Net-Capital Loss – the amount of all allowable capital losses incurred in the year or prior years which have not yet been deductible in computing income for tax purposes (ref: Paragraph 111(8)(a) of the ITA). *(Perte en capital nette)*

Non-Capital Loss – the aggregate of all business and property losses for tax purposes incurred in the year including allowable business investment losses. To the extent that a non-capital loss is not claimable in a taxation year, it may be carried over to other years. The carryover period extends back three taxation years and forward seven taxation years (ref: Paragraph 111(8)(b) of the ITA). *(Perte autre qu'une perte en capital)*

Taxable Capital Gain – one-half of the gain arising from the disposition of a capital asset. The amount of the gain is measured as the difference between the proceeds of disposition and the adjusted cost base of the asset. The portion of capital gains to be included in income will increase to 66 2/3% in 1988 and 75% in 1990. These rates are to be effective June 30, 1988 and January 1, 1990 respectively. For CCPCs the 66 2/3% rate is to be effective January 1, 1988 (ref: Paragraphs 38(a) and 40(1) of the ITA). *(Gain en capital imposable)*

Terminal Loss – the loss arising at the end of a taxation year when an unclaimed balance remains in a CCA class and the taxpayer no longer owns any property included in that class (ref: Subsection 20(16) of the ITA). *(Perte finale)*

Tax Credits:

Exploration Tax Credit (ETC) – Canadian Exploration Expenses in respect of wells costing more than $5 million earn a refundable ETC at the rate of 25% of such expenses. Expenses for overhead, financing charges, other expenses which are not well-specific, and expenses which attract incentives under the Petroleum Incentives Program and the Alberta Petroleum Incentives Program are not included. The ETC claimed reduces the amount of Canadian Exploration Expenses otherwise claimable. For taxation years prior to 1988 a refund of 40% of the credit not otherwise utilized in the year may be applied for by taxpayers. Only expenses incurred after March 31, 1985 to December 31, 1990 are eligible for ETCs. *(Crédit d'impôt à l'exploration)*

Foreign Tax Credit – a deduction from taxes otherwise payable of an amount equal to the lesser of the business income taxes paid to a foreign government in respect of business activity carried on in that country or the Canadian taxes otherwise payable on that activity. Certain carryover provisions (see below) are available where a corporation is unable to utilize the entire amount of foreign taxes paid in a given year as a foreign tax credit (ref: Subsection 126(2) of the ITA). *(Déduction pout impôt étranger)*

Foreign Tax Carryovers – business income taxes paid in a foreign country which are not fully creditable against Canadian income tax in the particular year may be carried forward for the five immediately succeeding years. No carryback provisions exist. A foreign tax carryforward is creditable against Canadian income tax in the subsequent five-year period only to the extent that the taxpayer has income from any business carried on in that particular country (ref: Paragraph 126(7)(b) of the ITA). *(Report d'impôt étranger)*

Investment Tax Credit (ITC) – Depending on the nature of certain capital or depreciable assets acquired in the year and the location in Canada where those assets are used, tax credits ranging from 7% to 50% of their capital cost are available. ITCs claimed in the year reduce the amount eligible for the Capital Cost Allowance in respect of the asset. Credits earned prior to April 20, 1983 were restricted to a maximum annual claim of $15,000 of tax payable plus one-half of the amount by which the ITC exceeds $15,000. Credits earned after April 19, 1983 may be claimed without limitation against tax payable or partially refunded where no taxes are payable. In its February 1986 Budget, the federal government announced the phaseout over two years, commencing in January 1987, of the general 7% and 10% ITC available in regions other than the Atlantic provinces. The existing 20% ITC available in the Atlantic region remain, and was extended to the offshore of that region. For taxation years ending after 1987, the ITCs deductible in computing tax payable are limited by an "annual investment tax credit limit". The rates of credit for research and development remain unchanged at 20% and 30% (ref: Section 127 of the ITA). *(Crédit d'impôt à l'investissement)*

Scientific Research and Experimental Development Tax Credit (SREDTC) – Corporations may deduct from income tax otherwise payable an amount not more than 50% of their expenditures incurred through the purchase of equity or debt obligation instruments issued by a research performing corporation pursuant to a Scientific Research Financing Contract. The corporation claiming the SREDTC must be the first purchaser of such debt obligations. The taxpayer may deduct from its tax otherwise payable under Part I, an amount not exceeding the aggregate of the credit earned in that year plus its unused credit for the year immediately following that year (ref: Section 127.3 and Section 194 of the ITA) (see also Investment Tax Credit). *(Crédit d'impôt pour la recherche scientifique)*

Other Tax Deductions:

Canadian Dividends – taxable dividends from either a taxable Canadian corporation or a corporation resident in Canada which is controlled by the dividend recipient. A deduction from income equal to the dividend received is allowed (ref: Subsection 112(1) of the ITA). *(Dividendes canadiens)*

Non-Taxable Foreign Dividends – dividends paid out of business income by corporations that are foreign affiliates (ref: Paragraph 95(1)(d) of the ITA). The dividends are recorded net of foreign withholding taxes. The rules for deductions in respect of dividends received from foreign affiliates are described in Subsection 113(1) of the ITA. *(Dividendes étrangers non imposables)*

Canadian Exploration and Development Overhead Expenses (CEDOE) – general and administrative costs, indirectly related to exploration and development activities, which are capitalized on CEE and CDE expenses and are deducted from resource profits used to determine resource allowance. *(Dépenses de frais généraux d'exploration et de mise en valeur au Canada)*

Federal Tax Abatement – a deduction from tax otherwise payable by a corporation equal to 10% of the corporation's taxable income earned in a province or territory. The deduction recognizes the fact that income tax is levied by provincial governments (ref: Subsection 124(1) of the ITA). *(Abattement d'impôt fédéral)*

Manufacturing and Processing Profits Deduction – a deduction from tax otherwise payable on income arising from the manufacturing or processing of goods in Canada of 6% of income not eligible for the small business deduction and of 5% of income eligible for the small business deduction. The Tax Reform reduces the difference between the general rate and the rate for manufacturing and processing profits to 2% in 1988; this difference will increase 1% annually through 1991, when it will reach 5%. For a corporation that qualifies for both the small business deduction and the manufacturing and processing profits deduction, the federal tax rate applicable before surtax, is 12% (ref: Section 125.1 of the ITA). *(Déduction pout bénéfices de fabrication et de transformation)*

Resource Allowance – a deduction from income equal to 25% of the taxpayer's resource profits. The deduction is allowed in lieu of any deduction for royalties paid to the Crown (ref: ITR 1210). *(Déduction à l'égard des ressources)*

Appendix D PMA Terms of Reference

Mandate of the Petroleum Monitoring Agency

The Petroleum Monitoring Agency (PMA) was established initially in 1980 under the Inquiries Act and continues under the Energy Monitoring Act (EMA)[1] after February 1983. The Agency's goals are to provide the federal government and Canadians generally with comprehensive and objective information on and analysis of the financial performance of the petroleum industry in Canada:

(a) to enable the Government of Canada to better plan and develop policies for the management of Canada's energy supplies and resources, and,

(b) to provide the Government of Canada and Canadians generally with assurances that those policies are being pursued and are effective.[2]

These goals are accomplished by publishing semi-annual and annual reports based on information received directly from all but the smallest oil and gas companies doing business in Canada.

To provide impartiality of reporting and maintain credibility among users, the PMA was created as a separate and independent Agency, with its Chairman reporting directly to the Minister of Energy, Mines and Resources.

The Act, at subsection 5(1), sets out that energy enterprises shall file, twice a year, returns providing data and information relating to:

(a) ownership and control,
(b) sources and application of funds,
(c) exploration, development, production, processing, refining and marketing,
(d) cost and revenues,
(e) deductions, credits, allowances and carry forwards provided under the Income Tax Act,
(f) the distribution and disposition of its revenues and profits,
(g) resources, reserves and properties,
(h) ownership or interest in any other enterprise,
(i) research and development programs, and
(j) other prescribed matters relating to oil and gas production, refining and marketing, and the funds derived from such activities.

Energy enterprises are defined as individuals, corporations, partnerships, trusts or organizations engaged in the exploration for, development, refining and marketing of oil and gas and having consolidated gross annual revenues or assets in excess of ten million dollars. Regulations prescribe that gross revenues and assets be determined according to accounting standards set out in the Canadian Institute of Chartered Accountants Handbook. Currently only corporations are surveyed by the Agency. Each energy corporation is required to report on a consolidated basis on the activities of corporations it controls or owns.

Sources of Data and Information

The data published in the *Petroleum Monitoring Report* are aggregate data derived mainly from survey schedules prescribed by regulations.[3] Since part of the Agency's information gathering function falls within areas covered by Statistics Canada, a number of data sharing agreements were negotiated between PMA and Statistics Canada under section 11 of the Statistics Act. These agreements reduce the industry's response burden in relation to the Agency's overall information requirements. Information also flows from PMA to Statistics Canada. Current data sharing agreements relate to:

- ownership and control of energy enterprises,
- capital structure,
- international flows of funds,
- research and development expenditures,
- exploration, development and capital expenditure intentions,
- quarterly corporate financial statistics, and
- capital expenditures and operating costs.

The first five of these involve transmission of information to the PMA; the last includes information on such subjects as exploration, development and production expenditures, and royalties from the PMA to Statistics Canada.

(1) S.C. 1980-81-82-83, c. 112.
(2) P.C. 1980-2137.
(3) Currently prescribed schedules are contained in regulation SOR/88-287

Data Coverage

Industry gross revenues covered by the PMA through aggregation of returns from 127 reporting enterprises account for 92% of upstream industry revenues as determined by Statistics Canada. The remaining 8% of industry revenues accrue to firms having revenues or assets below the Agency's current reporting thresholds. The high degree of coverage of industry revenues and the inclusion of all but the smallest energy enterprises enable conclusions drawn from Agency aggregates to be applied to the industry as a whole. Degrees of coverage of other performance indicators are presented below.

Comparison of PMA Data with 1987 Industry Aggregates
Percentage of industry aggregates covered

Upstream Production Revenues	92
Upstream Expenditures in Canada	90
Production Volumes:	
Crude Oil and Liquids	92
Marketable Natural Gas	90
Refined Product Sales Volumes	98

Comparison of Survey Results – PMA vs. Statistics Canada

The petroleum industry's financial performance is regularly compared to that of other sectors of the economy using aggregate data from Statistics Canada. Net income and rates of return information provided in Chapters 1 and 2 of this report will differ slightly from the results shown in Chapter 3 and in Appendix A14, because the latter are based on Statistics Canada data.

Petroleum industry data from Statistics Canada, while covering a greater number of companies than the PMA survey, exclude government business enterprises as well as the foreign activities of Canadian petroleum companies. The PMA survey covers the global activities of petroleum companies operating in Canada, including Crown corporations, provided these companies meet the minimum requirements in terms of assets and revenues. In addition, though Statistics Canada may make adjustments to company reported data, the PMA reports only on the industry's activities as they are submitted. For example, in 1983, a write-down by one large Canadian-controlled company of assets of $1 billion was treated as 'extraordinary' by Statistics Canada, whereas the Agency accepted the entry as 'ordinary', as reported by the company.

Regarding rates of return, both agencies determine return on capital employed by adding back to net income the after-tax portion of interest on long-term debt. While the PMA produces this calculation for each company individually, using the statutory tax rate on that portion of interest expense which would increase net income, the add back on Statistics Canada aggregate industry results must rely on the average effective tax rate, i.e. current taxes as a percentage of net income before taxes.

Ownership and Control Determination

The Agency publishes annually information on the level of Canadian ownership and control of the oil and gas industry in Canada. The methodology and sources of information underlying its analyses are summarized below.

In the process of control determination, the Agency has based its definition on whether Canadian or foreign shareholders have potential control over a reporting enterprise's overall operations. Control is a contractual right conferred upon a person, or group of persons, to direct, within the limitations of relevant statutes, in the present or at some future date, the affairs or management of a company, on a day to day basis or otherwise, usually through the appointment of a majority of a board of directors. Control is not to be confused with managerial responsibility for the firm. The concept of control emerged in order to recognize the separation in modern corporations between managers and shareholders. Shareholders assert control over management through the board of directors and the shareholders' meeting.

Control that is exercised by, for instance, nominating and electing the majority of the directors is active control. Control is just as real when the shareholder with a continuing right to intervene chooses instead, for whatever reason, not to exercise that right. The latter unexercised option to take active control is called potential control. For the purposes of the PMA, the two types of control – active and potential – are equivalent. Both types are called control. The Canadian Business Corporations Act similarly embraces the concept of potential control within its definition of control which refers to sufficient votes, "*if exercised*, to elect a majority of the directors of the body corporate."

While control is generally based on the ownership of 50% or more of voting shares, it is possible for control to be exercised with a smaller ownership block. A person who owns at least 51% of the voting shares is said to have "de jure" control. One who owns less than 50% of the voting shares, but is able to alter the composition of the board of directors and/or management, is said to have "de facto" control. Statistics Canada assigns "de facto" control of a public corporation, for the purposes of the Corporations and Labour Unions Return Act (CALURA), to a person owning at least 20% of the outstanding voting shares when no other two shareholders together own as much as 20%.[1] The PMA methodology for determining control in such cases is consistent with that used by Statistics Canada. "De facto" control may also be conferred upon a person, or group of persons, owning less than 51% of the voting shares of a public or private corporation through several other mechanisms:

(a) *Blocks of voting shares* – Two or more shareholders whose holdings together sum more than 50 % of total shares and who generally act in concert.

(b) *A shareholders' agreement* – An agreement among some or all shareholders to vote or act in certain ways in various contingent circumstances, especially in relation to naming directors.

(c) *Options* – A minority shareholder enjoys the right at any time to acquire additional voting shares to raise his holdings to 51% or more of the outstanding voting shares.

(d) *Personal Relationships* – Where two shareholders are related by blood relationship, marriage or adoption, they may be deemed to constitute a voting group.

(e) *Interlocking Directorships* – When corporation A owns at least a minimum percentage of voting shares of corporation B, and is the single largest minority shareholder of corporation B, and both corporations share a large number of common directors, corporation A is said to control corporation B.

For purposes of determining the industry-wide level of control, 100% of the relevant yard stick of the controlled company is assigned to the appropriate control category. Thus, regardless of the percentage ownership of voting rights by non-residents, if the company is effectively controlled by non-residents, then for statistical purposes 100% of its activities are assigned to the foreign-controlled sector. To illustrate, several integrated companies included in this report, though all foreign controlled, have varying degrees of Canadian ownership (up to 30%). However, when measuring the level of control the entirety of their relevant corporate activities is assigned to the appropriate control sector.

In the case of ownership, that percentage of the relevant yardstick which represents the beneficial ownership of formal equity by non-residents is assigned to the foreign-owned category, while that of Canadian residents is assigned to the Canadian-owned category.

The most commonly used yardsticks are upstream or total petroleum-related revenues (upstream plus downstream). Ownership and control are generally measured on gross revenues recognizing that these best reflect economic activity and that they are a stable proxy for net economic benefits over time. For example, the deduction of royalties from gross petroleum revenues would have little or no impact on the relative distribution of revenue between Canadian and foreign owners.

Other measurement bases such as assets or capital employed do exist but suffer from the deficiencies of relying upon historical 'book' values rather than current market value, and of being subject to the different accounting techniques used in the petroleum industry such as the full cost and successful efforts methods.

The Agency has access to ownership and control information collected under CALURA from those enterprises which report under the EMA. CALURA requires detailed disclosure of ownership information from all owners of blocks of shares equal to or greater than 5% of total voting shares. Should a reporting energy enterprise fail to file a timely return under CALURA, Regulation SOR/85-328 authorizes the Agency to obtain the ownership and control information directly.

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(1) *The Ownership, Control, and Country of Control of Corporations*, Statistics Canada, June 4, 1987, p. 8.

Recently, the Agency took steps to 'look through' the nationality and ownership of nominee holdings deemed to be Canadian due to the residence of the nominee regardless of that of the beneficial owner. Energy enterprises were requested to grant the PMA access to their Holders of Record listings held by depositories in Canada and the U.S.A. In several instances, such information revealed a significantly lower degree of beneficial Canadian ownership than reported in CALURA information. The results of this activity will be published in future monitoring reports.

Inter-period Comparability of Results

The Canadian Petroleum Industry Monitoring Report presents comparisons of the current reporting period's results with those of previous comparable periods. Such comparisons are sensitive to changes in the list of reporting companies defined as the 'industry', in its analytic groups, i.e. integrateds and refiners, and oil and gas producers, and in the control status of reporting enterprises. To permit valid inter-period comparisons, the Agency consistently fixes industry group membership and control according to the reported information for the current period, and imposes that membership and control on results for the prior reporting periods.

Lists of reporting enterprises (i.e. corporations with more than $10 million in assets or sales) are updated each reporting period. Newly qualifying enterprises are added to the industry aggregates and the respective group only when results for two comparable reporting periods are available. Occasionally, enterprises exit from the industry during the current period, by acquisition or wind-up. Prior period results for both the industry and the group presented in the current period's report will reflect the exit of the former reporting enterprise: the enterprise is excluded from the current and the prior period aggregates. Should the exit result from acquisition by a reporting enterprise, the acquired enterprise's prior period results are added to those of the acquiring enterprise regardless of whether the acquired enterprise was in the same analytic group as the acquisitor.

Divestitures or acquisitions by reporting enterprises during the current period may result in an enterprise satisfying the inclusion criteria of an analytic group other than that to which it has been assigned in the prior period's Monitoring Report. For example, where an integrated group member divested itself of its downstream operations during the current period, it would be included in either the senior or junior producer group, depending upon the facts of the matter, for the current period and with that group's aggregate results for the corresponding prior period. It is important to note that all the divesting enterprise's prior period assets and revenues, regardless of the segment of operations, are transferred to the current period analytic group to establish prior period analytic group aggregates.

Similar adjustments to industry and analytic group aggregates are made in cases where ownership switches from Canadian to foreign or vice versa. The current period nationality of ownership determines that of the prior period for purposes of inter-period comparisons. However, in that part of the annual Monitoring Report dealing with ownership and control, the analysis takes into account the changes in the control of the reporting companies as they occur.

Appendix E Reporting Energy Enterprises

AGIP Canada Ltd.
Alberta Energy Company Ltd.
Alberta Oil Sands Equity
Altana Exploration Company
Amerada Minerals Corporation of Canada Ltd.
American Eagle Petroleums Ltd.
American Trading and Production Corporation
Amoco Canada Petroleum Company Ltd.
Anadarko Petroleum Of Canada Ltd.
Anderson Exploration Ltd.
Asamera Inc.
AT&S Exploration Ltd.
ATCOR Ltd.
Barnwell Of Canada, Limited
Bow Valley Industries Limited
Bowtex Energy (Canada) Corporation
BP Canada Inc.
Bralorne Resources Limited
Canada Northwest Energy Limited
Canadian Hunter Exploration Ltd.
Canadian-Montana Gas Company Limited
Canadian Occidental Petroleum Ltd.
Canadian Roxy Petroleum Ltd.
CANPEX Co. Ltd.
Canterra Energy Ltd.
Carlyle Energy Ltd.
Chauvco Resources Ltd.
* Chevron Canada Limited
Chevron Canada Resources Limited
Chevron Standard Limited
Chieftain Development Co. Ltd.
CN Exploration Inc.
Columbia Gas Development Of Canada Ltd.
Conoco Canada Limited
Conwest Exploration Company Limited
Cooperative Energy Development Corporation
Coseka Resources Limited
Czar Resources Ltd.
DCP Canada Inc.
Dekalb Petroleum Corporation
Denison Mines Limited
Dome Petroleum Limited
Dorset Energy Corporation
Drummond Oil & Gas Ltd.
Dynamar Energy Limited
Dynex Petroleum Ltd.
Encee Group Ltd.
Encor Energy Corporation Ltd.
Enerplus Resources Corporation
Enron Oil Canada Ltd.
Erskine Resources Corporation
Excel Energy Inc.
* Federated Co-operatives Limited
Forest Oil Corporation (Canada Division)
General Electric Canada Inc.
Gulf Canada Resources Ltd.
Hamilton Brothers Canadian Gas Company
Harvard International Resources Ltd.
Home Oil Company Limited
* Husky Oil Ltd.
* Imperial Oil Limited
ICG Resources Ltd.
Inverness Petroleum Ltd.
* Irving Oil Limited
J.M. Huber Corporation
Kerr-McGee Corporation
Koch Exploration Canada Ltd.
LASMO Canada Inc.
LL&E Canada Ltd.
Luscar Limited
Mark Resources Inc.
Maxus Energy Canada Inc.
Mobil Oil Canada, Ltd.
* Mohawk Oil Co. Ltd.
Morgan Hydrocarbons Inc.
Murphy Oil Company Ltd.
Newfoundland Processing Limited
New Grade Energy Inc.
Norcen Energy Resources Limited
North Canadian Oils Limited
Norwich Resources Canada Ltd.
Novalta Resources Ltd.
Nova Scotia Resources Limited
Numac Oil & Gas Ltd.
Oakwood Petroleums Ltd.
Ocelot Industries Ltd.
Omega Hydrocarbons Ltd.
Page Petroleum Ltd.
Paloma Petroleum Ltd.
Panarctic Oils Ltd.
PanCanadian Petroleum Limited
* Parkland Industries Ltd.
Pecten Canada Ltd.
Pembina Resources Limited
Pennzoil Petroleums Limited
* Petro-Canada Inc.
Petrorep (Canada) Ltd.
* Petrosar Limited
Phillips Petroleum Canada Ltd.
Phillips Petroleum Co. Western Hemisphere
Phillips Petroleum Resources Ltd.
Placer CEGO Petroleum Limited
Poco Petroleums Ltd.
Ranchmen's Resources Ltd.
Ranger Oil Limited
Renaissance Energy Ltd.
Roan Resources Ltd.
Royal Trust Energy Corporation
Saskatchewan Oil & Gas Corporation
Sceptre Resources Limited
* Shell Canada Limited
SOQUIP
Star Oil & Gas Ltd.
Sulpetro Limited
* Suncor Inc.
TCPL Resources Ltd.
* Texaco Canada Inc.
Tintagel Energy Corporation
Total Petroleum (North America) Ltd.
Trans-Canada Resources Ltd.
Trillium Exploration Corporation
Trilogy Resources Corporation
Triton Canada Resources Ltd.
* Turbo Resources Limited
* Ultramar Canada Inc.
Ultramar Oil and Gas Canada Limited
Union Pacific Resources Inc.
United Canso Oil & Gas Ltd.
Universal Explorations (83) Limited
Unocal Canada Ltd.
Voyager Energy Inc.
Wainoco Oil Corporation
Webb International Minerals Inc.
Westar Petroleum Ltd.
Westcoast Petroleum Ltd.
Western Decalta Petroleum (1977) Limited
Westmin Resources Limited

* Denotes companies included in group of 'Integrateds and Refiners'.
All other companies belong to the category of 'Oil and Gas Producers'